The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1649.—Vol. XXXVII. LONDON, SATURDAY, MARCH 30, 1867. {STAMPED ....SIXPENCE. UNSTAMPED..FIVEPENCE.

Mining Exchange, London.

MINING EXCHANGE, LONDON.—As the rules of the Mining Exchange PROHIBIT all its MEMBERS from ADVERTISING MINING SHARES at FIXED PRICES, the Committee feel it their duty to notify that they have no means of offering redress to such of the public as may deal with those advertising shares at fixed prices.
A List of the Members can be had on application to the Secretary. 1

MR. JAMES CROFTS, STOCK AND SHAREBROKER, No. 1, FINCH LANE, CORNHILL.
(Established 24 years.)
HOLDERS of mining shares DIFFICULT OF SALE in the OPEN MARKET may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring ADVICE how to act in the DISPOSAL or ABANDONMENT of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.
NORTH WHEAL CHIVERTON SILVER-LEAD.—Prospectuses may be had of Mr. CROFTS, who will use his influence to procure to early applicants an allotment of the shares. A considerable number have already been applied for. Shares, only 3000.
PRINCE OF WALES.—See report: 153 tons of ore sampled to-day, and 100 tons more will be ready for sampling this day month. The mine is reported throughout as being in a most satisfactory condition, the productive points being worth £80 per fm. The price of the shares is entirely in favour of buyers.
*** Business in Okel Tor shares.
*** Telegrams instantly answered.
Bankers: National Bank of Scotland, Finch-lane. 2

WILLIAM LANE (SUCCESSOR TO JAMES LANE), 44, THREADNEEDLE STREET, LONDON, E.C., STOCK AND SHAREDEALER (Established Thirty Years), has FOR SALE the following SHARES:—

50 Bottle Hill, 4s. 6d.	20 E. Rosewarne, 12s 6d	10 Marke Valley, £4 7s 6d
15 Chiverton, £7⅜.	50 East Snaefell, 21s.	50 Mineral Rights, 8s 6d.
25 Caldbeck Fells, 15s.	15 Gt. No. Downs, £4⅛.	20 Okel Tor, 24s.
50 Chontales, (£3⅛ pd.), £2 13s. 9d.	5 Great Laxey, £17¾.	50 Prince of Wales, 56s 6d
	10 Great Wh. Vor, £20.	10 Prosper Untd., £3¾.
30 Drake Walls, 13s.	25 Gt. No. Laxey, 27s. 6d	1 Providence, £33⅛.
20 East Russell, £3¼.	15 Hingston Down, £2¾	25 South Darren, 22s.
25 East Carn Brea, £2¾.	50 Lady Bertha, 2s.	5 West Chiverton, £69.
10 East Lovell, £10¼.	25 No. Treskerby, £2 2 6	20 Wheal Grenville, 24s.
	15 North Crofty, £5 12s.	50 Wheal Crebor, 12s. 6d.

Clients and parties in the country wishing to dispose of shares will find this advertisement a ready means of doing so, by forwarding me a list of their holding.
Approved references given to any part of the United Kingdom.
Money advanced on approved mining shares. 3

MR. LELEAN, ENGLISH AND FOREIGN STOCK AND SHAREDEALER, 11, ROYAL EXCHANGE, LONDON, E.C.
Bankers: Robarts, Lubbock, and Co., Lombard-street. 4

GUIDE TO INVESTORS.—MR. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for April contains the ninth of a series of articles on the whole circle of Investments; with such information as is necessary to guide intending investors amidst the shoals and quicksands of the multifarious species of investments now in the market.
Published by Mr. BAKER LELEAN, at his offices, 11, Royal Exchange, London, E.C. 6d. per copy, or 5s. annually, post free. 5

JOHN RISLEY, STOCK AND SHAREBROKER (SWORN BROKER), 32, LOMBARD STREET, LONDON, E.C.
BUSINESS TRANSACTED in EVERY DESCRIPTION of STOCKS and SHARES, on commission only.
Rankers: London and Westminster, Lothbury. 6

MR. WILLIAM WARD, STOCK AND SHAREDEALER, No. 29, THREADNEEDLE STREET, LONDON, E.C. 7

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C. 8

JAMES D. GENN AND CO., STOCK AND SHAREDEALERS, 3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C. 9

MESSRS. McNEILL AND LONG, STOCK, SHARE, AND MINING DEALERS, 31, THREADNEEDLE STREET, LONDON, E.C. 10

MR. JOHN LITTLE, STOCK AND SHAREDEALER, 77, OLD BROAD STREET, LONDON, E.C. (late of Redruth).
Immediate attention to orders by telegraph or letter.
Prompt cash settlements. 11

MESSRS. WARD AND JACKMAN, STOCK AND SHAREDEALERS, CUSHION COURT, OLD BROAD STREET, CITY, E.C.
Closing Prices, Friday Evening, March 29.

	Buyers.	Sellers.		Buyers.	Sellers.
Carn Brea	£11	-£13	North Treskerby	£ 1⅞	-£ 2⅛
Chiverton	6½	7	North Crofty	5½	5¾
Chiverton Moor	5⅞	6⅛	Providence	31	33
East Carn Brea	2⅞	2¾	South Condurrow	⅞	1
East Caradon	5½	6	South Crofty	15	17
East Grenville	2¾	3	Trelyon Consols	3½	4
East Lovell	10	10½	West Chiverton	67	69
East Russell	3	3¼	West Seton	137½	142½
Frank Mills	25s.	27s 6d	Wheal Basset	65	70
Great North Laxey	25s.	30s.	Wheal Buller	20	22½
Great Retallack	3⅛	3⅜	Wheal Grenville	1	1¼
Great Vor	19½	20	Wheal Mary Ann	13	14
Herodsfoot	32	33	Wheal Seton	104	106
Marke Valley	4⅛	4¾	Prince of Wales	55s.	57s.

Messrs. WARD and JACKMAN refer their friends to their remarks on p. 205.
March 29, 1867. Bankers: London and Westminster, Lothbury. 12

MR. THOMAS THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.
Strongly recommends the immediate purchase of Westminster, Central Snaefell beach, and East Snaefell shares. 13

SHARES FOR SALE, at a GREAT SACRIFICE, in a VALUABLE SLATE QUARRY in WALES. £5 shares, £3 10s. paid. Offer wanted.—"B. L," care of Messrs. Field and Tuer, 136, Minories, London.

WILLIAM MICHELL has most RELIABLE INFORMATION from EAST RUSSELL, and he would recommend the shareholders to hold on their shares for a week or two more, as the cutting into the lode cannot fairly be delayed beyond that time, when it will be proved whether the detractors of this mine and the "bears" of the shares are right or wrong. A change of local management is very desirable here, and anyone agreeing with me will oblige by sending me their proxies for the next meeting. I am quite certain a more satisfactory and better state of things would very soon be brought about.
"J. R." (Bradford).—1. There is no Official List of prices sent out from the Mining Exchange. A list is made out by a member of a firm in St. Michael's-alley for the City Article, which is written by another member of that firm, therefore I will leave you to judge what bias is exercised, as quotations are often given when the shares are not dealt in, and *vice versa*.—2. They are facts which cannot be contradicted, or he would be too ready to avail himself of the opportunity to do so.—3. It is worse than a Chinese puzzle to him.
Money advanced on Mining Shares.
Bankers: London Joint-Stock and National Provincial of England.
March 29, 1867. Apply to WILLIAM MICHELL, 42, Cornhill, London, E.C. 15

MR. GEORGE BUDGE, STOCK AND SHAREDEALER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 19 years), has FOR SALE at nett prices:—50 Okel Tor, £1 4s. 6d.; 100 Tolcarne, 2s. 6d.; 100 Anglo-Brazilian, 11s.; 60 Old Gunnislake; 50 Dale, 2s.; 60 Redmoor, 8s. 3d.; 100 West St. Ives; 60 West Kitty, 11s. 9d.; 20 Rose and Chiverton, £6; 90 Mineral Rights, 9s.; 25 Hollybush Coal (£3 paid), £2½; 20 Gawton, £3⅛; 200 New Treleigh, 14s. 6d.; 30 Crebor, 10s.; 70 Lady Bertha, 2s. 6d.; 80 West Drake Walls; 80 Caldbeck Fells; 100 West Prince of Wales; 70 Wheal Agar; 120 Hallenbeagle, 8s.; 25 Chiverton Moor; 50 East Rosewarne; 85 South Grenville, 7s.; 20 East Caradon; 100 Don Pedro; 50 Prince of Wales; 20 South Darren; 2 West Chiverton; 80 Great South Tolgus, 14s.; 5 Tincroft; 50 Grenville; 150 Port Phillip; 50 Roaring Water; 20 Great Retallack, £3; 10 Marke Valley, £4¾; 5 Great Laxey, £18; 1 Wheal Seton, £106; 30 Drake Walls, 14s.; 20 Chiverton Moor, £6½. 14

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of yesterday (Friday), March 29, No. 417, Vol. IX., price 6d. each copy, forwarded on contains information on the following mines:—

North Wheal Chiverton.	West Great Work.	East Basset.
West Chiverton.	Great Wheal Vor.	Brittany Silver-Lead Mining Company.
North Wheal Crofty.	Trumpet Consols.	
Prince of Wales.	East Wheal Lovell.	

And an article on the Share Markets.
N.B.—PETER WATSON can recommend THREE DIVIDEND and THREE PROGRESSIVE mines, which he can strongly recommend for a great rise in price on the intrinsic merits of the mines alone.
PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C. 17

STOCK AND SHAREDEALER.—MR. PETER WATSON, ENGLISH and FOREIGN STOCK, SHARE, and MINING OFFICES, 79, OLD BROAD STREET, LONDON, E.C.
Railway, Joint-Stock Banks, Dock, Insurance, Canal, Mining, Steam-ship, &c., and every other description of shares bought and sold at nett prices.
TELEGRAPHIC MESSAGES to BUY or SELL Railway, Bank, Mine, and other shares and stocks, punctually attended to, at nett prices for cash, or for fortnightly settlements, with advice as to purchases or sales.
Twenty-two years' experience.
(Two in Cornwall and Twenty in London.)
Bankers: The Alliance Bank, and the Union Bank of London.
From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, PETER WATSON is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality, and to the best advantage of his clients. 18

MR. EDWARD COOKE, STOCK AND SHAREDEALER, 76, OLD BROAD STREET, LONDON, E.C.
Has SPECIAL BUSINESS in Chontales, Prince of Wales, East Lovell, Frank Mills, South Darren, West Caradon, Prosper United, and North Crofty.
Stock Exchange securities dealt in at close market prices.
Satisfactory references given in any town in the United Kingdom.
Bankers: Alliance Bank. 19

MESSRS. POWELL AND MOSS, 78, OLD BROAD STREET, LONDON, E.C. (Members of the Mining Exchange), STOCK AND SHAREDEALERS, transact business in the purchase and sale of every description of marketable securities, at close nett prices, for cash or the fortnightly settlement.
A daily list forwarded on application.
Bankers: Bank of England. 20

MR. JAMES HUME, 74, OLD BROAD STREET, MEMBER OF THE MINING EXCHANGE.
Transacts buying and selling orders at nett prices, equivalent to 1¼ per cent. commission:—

	Latest prices.		Latest prices.
East Russell	£ 3 - £ 3¼	Chiverton Moor	£ 5¾ - £ 6¼
Crebor	⅜ - ½	West Chiverton	65 - 67
Prince of Wales	55s. - 56s.	Wheal Uny	1¾ - 2
Okel Tor	1⅛ - 1⅜	North Treskerby	39s. - 41s.
West Drake Walls	8s. - 10s.	South Condurrow	18s. - 20s.

Some of the above may be bought with a certainty of a great rise in price.
Mr. J. HUME'S "Circular" for this month is now ready, and ought to be perused by all interested in mines, and by all intending investors.—6d. per copy, or 5s. annual subscription.
Bankers: The London Joint Stock Bank. 21

MESSRS. WILSON, WARD, AND CO., STOCK AND SHAREDEALERS, 16, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Can recommend two good mines for investment. 22

BARTLETT AND CHAPMAN, STOCK AND SHAREDEALERS, 2, BUCKLERSBURY, LONDON, E.C.
Business transacted in every description of stocks and shares at lowest market prices, free of commission.
All communications will receive immediate attention, either personally or by letter.
N.B.—LOVELL CONSOLS: Intending investors should not delay purchasing at present low prices. Bankers: London and Westminster. 23

GREAT SOUTH CHIVERTON MINE.—BARTLETT AND CHAPMAN recommend the PURCHASE of these SHARES for PERMANENT HOLDING. The mine is looking remarkably well, as will be seen by the agent's report in last week's Journal. £100 or £200 invested in this property cannot fail to prove highly remunerative.
Further particulars, with plans of the district, can be obtained on application to BARTLETT and CHAPMAN, No. 2, Bucklersbury, London, E.C. 24

THE INVESTMENT CIRCULAR AND FINANCIAL RECORD, published by BARTLETT and CHAPMAN, No. 2, BUCKLERSBURY, LONDON, E.C., should be consulted by all intending Purchasers of Mining or other Stock. Forwarded gratis and post free, on application. 25

MR. T. ROSEWARNE, 81, OLD BROAD STREET, has BUSINESS, at close market prices, as BUYER or SELLER, in—

*Bedford United.	Dale.	*East Gunnislake.
North Crofty.	*West Caradon.	West Basset.
*East Russell.	*Great Retallack.	North Retallack.
*Wheal Seton.	Great North Downs.	Devon Consols.
*South Grenville.	*Drake Walls.	Buller.
Prosper United,	Great North Laxey.	Lady Bertha.
Bryn Gwiog.	Crebor.	East Basset.
East Grenville.	Caldbeck Fells.	Great Vor.
North Treskerby.	Tincroft.	South Condurrow.
West Chiverton.	Redmoor.	Providence.
Ding Dong.	Rosewall Hill.	

T. ROSEWARNE is a BUYER of any part of 2000 Okel Tor, at market prices.
Special information given on this mine, also on shares marked thus *.
PRINCE OF WALES.—The reports this week are most satisfactory. The mine never looked better than at the present, which will be shown by the dividends which will be paid. I say again to all my friends increase your interest, and bear in mind that the north lode is yet to be cut, and when it is it is likely to prove as valuable as the one now working upon.
Money advanced on mining shares.
Bankers: Bank of England and Consolidated. 26

MESSRS. J. TAYLOR AND CO., MINING AGENTS AND SHAREDEALERS, 17, CROSS STREET, MANCHESTER, have FOR SALE:—

50 Penhale and Lomax.	20 Silver Brook.	100 Rosecliff & Tolcarne.
100 Great East Lovell.	100 N. Birch Tor & Vitifer	50 Great Mona.

J. TAYLOR and Co. strongly recommend the immediate purchase of Great Mona shares, which must soon command a good premium. 27

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE, LONDON, E.C. (Members of the Mining Exchange), STOCK AND SHAREDEALERS, AND FINANCIAL AGENTS, transact business in all kinds of securities at closest nett prices for cash or account.
Parties of respectability can have transfers registered in their names previous to payment.
Daily price list on application.
Bankers: London and County Bank. 28

MESSRS. FREDERIC GILL AND CO., STOCK AND SHAREDEALERS, ST. CLEMENT'S HOUSE, CLEMENT'S LANE, LONDON, E.C., TRANSACTS BUSINESS in all MINING STOCKS and SHARES at closest market nett prices, either for cash or account.
Bankers: City Bank. 29

INVESTMENT, LOAN, AND BANK AGENCY.
Established 1839.
BANKERS—London and County Bank.
Purchases and Sales of British and Foreign Stocks and Shares negotiated upon advantageous terms.
A record of the facts affecting the values of the various leading Public Securities is kept for the guidance of Investors.
Money received on deposit at the following rates:—

Repayable at 14 days' notice	4 per cent. per annum.
Deposits for three months certain	4¼ ditto
Ditto for six months certain	5 ditto

Loans granted on Stocks and Shares having a market value.
Bank and Money Agency Business generally undertaken.
CHARLES PETERS, Secretary.
No. 12, Clement's-lane, Lombard-street, London, E.C. 30

MR. CHARLES THOMAS, MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER, 3, GREAT ST. HELEN'S, LONDON, E.C. 31

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, UNION CHAMBERS, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Mr. THOMAS can now recommend two mines, the market prices of which are below £1 respectively, especially for an early and great advance; names and full particulars he will forward upon application, accompanied by 10s. stamps. 32

SAFE INVESTMENTS FOR CAPITAL,
Paying 5 to 20 per cent. per annum upon the outlay.
SHAREHOLDERS, CAPITALISTS, TRUSTEES, and INVESTORS seeking valuable and reliable information, and requiring safe, sound, and profitable investments, should at all times consult
SHARP'S GENERAL INVESTMENT CIRCULAR
(Post free).
It is a safe guide, giving every information to shareholders and capitalists.
GRANVILLE SHARP, STOCK & SHAREDEALER, 32, POULTRY, LONDON. 33

MR. JOHN B. REYNOLDS OFFICES, 70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.
Business transacted in British and Foreign Stocks, Railway, Bank, Insurance, Financial, or Mining Companies Shares, and all Miscellaneous Securities, at the lowest market quotations.
Exchanges effected and purchasers found for shares not generally marketable
Mr. REYNOLDS is a BUYER or SELLER of Great Retallack, Great Laxey Rose and Chiverton, Great Wheal Vor, West St. Ives, West Kitty, North Dolcoath, West Great Work, North Crofty, and all market mines.
All communications from clients are treated as strictly in confidence.
Telegrams promptly attended to. Established Ten Years.
Bankers: City Bank. 34

WEST ST. IVES.—The attention of Capitalists is particularly directed to the merits of this property. I have SPECIAL BUSINESS in these shares, both as BUYER and SELLER, and am prepared to furnish a copy of Capt. Pope's report to any applicant, together with copies of subsequent report, on receipt of stamps, 2s. 6d.
J. B. REYNOLDS, 70 and 71, Bishopsgate-street, London, E.C. 35

ROSE AND CHIVERTON UNITED.—A ground plan and section are now on view at the offices of the company, as well as a special report of Capt. Hancock, of Polberro. Both of these can be inspected on application, and copies of his report, and another special report, be forwarded on receipt of stamps value 2s. 6d. J. B. REYNOLDS.
70 and 71, Bishopsgate-street Within, London. 36

WANTED:—50 WHEAL KITTY (Lelant), and any part of 250 WHEAL AGAR. State lowest price, cash or account.
H. B. RYE. 77, OLD BROAD STREET, and MINING EXCHANGE.
Established in Cornwall and London 25 years.
March 29, 1867. 37

MR. EDWARD BREWIS TRANSACTS BUSINESS in all MINE STOCKS and SHARES, at nett prices, for cash or account.
Clients' business telegrams promptly attended to.
8, Warnford-court, Bank, E.C., London. 38

MR. WILLIAM SEWARD, STOCK AND SHAREDEALER, 19, THROGMORTON STREET, LONDON, E.C. 39

GEORGE RICE, STOCK AND SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C. (Member of the Mining Exchange), (25 years' experience), TRANSACTS BUSINESS in MINING SHARES, at close prices.
SPECIAL BUSINESS in Chiverton Moor, East Lovell, Great Vor, North Crofty, West Chiverton, and Prince of Wales.
Money advanced on mining shares.
March 29, 1867. Bankers: Bank of England. 40

MATTHEW GREENE, STOCK AND SHAREDEALER, ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C.
MATTHEW GREENE is always prepared to deal at close prices in Stock Exchange securities and mining shares, and has FOR SALE the FOLLOWING SHARES, nett and free of commission:—

10 Great Laxey, £17¼.	10 Clifford, £6¾.	100 Bottle Hill, 5s.
50 Chontales, £2½.	15 East Caradon, £5¼.	65 Penhale & Lomax, 3s 6
50 Pri. of Wales, 55s. 6d.	10 Westminster, £5.	20 East Bottle Hill, 5s.
20 Chiverton Moor, £6.	20 New Clifford, £2¾.	10 East Basset, £20⅛.

OFFER WANTED for £160 Stock Millwall Freehold Land and Dock; 5 (£25 paid) London and Glasgow Engineering and Iron Ship Company.
Bankers: Messrs. Ransomes, Bouverie, Pall Mall, and Imperial Bank, City.
A daily list of prices post free on application. 41

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 12 years), has FOR SALE the FOLLOWING SHARES, at nett prices:—

50 Penhale & Lomax, 4s.	50 Rosewarne Cons., 4s.	20 East Bottle Hill, 4s.
25 Wheal Agar, 28s.	4 Wh. Margaret, £6¼.	50 East Seton, 8s. 3d.
5 Carn Brea, £12¾.	5 North Roskear, £8⅜.	25 Rosewall Hill, 43s. 3d
40 W. Prin. of Wales, 10s 3	45 Frank Mills, 25s. 9d.	60 Lady Bertha, 1s. 9d.
2 Providence, £32¾.	50 Crebor, 10s. 6d.	50 W. Drake Walls, 8s 9d
30 Drake Walls, 11s. 6d.	50 Caldbeck Fells, 16s 3d	5 Cook's Kitchen, £12¼
50 Gt. So. Tolgus, 14s.	15 Gt. No. Downs, £3 19s	20 East Russell, £3 3 9
25 North Crofty, £5¾.	20 Wheal Uny, 35s. 9d.	15 East Caradon, £5⅛.
60 Frontino, 4s. 6d.	5 W. Chiverton, £68¼.	4 West Frances, £12¾.
50 Bottle Hill, 4s. 6d.	30 No. Treskerby, 41s 9d	30 Chontales, 16s. 3d. dis.
5 Gt. Wh. Vor, £19¼.	1 Wheal Seton, £105½.	10 Great Laxey, £17¼.
50 Gt. No, Laxey, 28s.	20 Chiverton Moor, £6⅛.	20 Okel Tor, 24s. 9d.
1 Wheal Basset, £67¾.	25 Gt. Retallack, £3 6 3	3 South Crofty, £17¼.
60 S. Condurrow, 19s. 6d	80 Mineral Rights, 7s 9d	30 E. Carn Brea, £2 13 9
10 East Lovell, £10⅜.	50 Redmoor, 8s. 3d.	50 Prince of Wales, 55s 9
30 Prosper Unit., £3⅜.	25 Trelyon Cons., £3 11 3	5 West Cwm Erfin, £7.

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MR. G. D. SANDY, STOCK AND SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS BUSINESS in EVERY DESCRIPTION of STOCK EXCHANGE SECURITIES, MINING and FINANCIAL ENTERPRISES, at close market prices.
Mr. G. D. SANDY'S Circular for the present month, is now ready, and should be perused by all interested in mining enterprise. Gratis, post free.
Correct Daily Price List may be had on application.
Money advanced to any amount on legitimate stocks and shares.
References exchanged. 43

MESSRS. DEBENHAM AND CO., STOCK AND SHARE BROKERS, No. 37, MOORGATE STREET, LONDON, E.C. (and at ST. ALBANS).
WANTED TO PURCHASE—New Quebrada and Frontino and Bolivia shares. Sellers to state number and lowest price. 44

MR. JOHN HOSKING, MINING ENGINEER, (Late of Ashburton, Devon).
Mr. HOSKING, having had 20 years' practical experience, OFFERS HIS SERVICES as MINE SURVEYOR, VALUER of MINING MACHINERY, or to INSPECT any MINING PROPERTY, either at home or abroad. Terms on application.—14, Liverpool-street, London, E.C. 45

MR. R. EMERSON, 28, GREAT WINCHESTER STREET, LONDON, E.C., has the FOLLOWING SHARES FOR SALE:—60 Okehampton Mining Company, 10s.; 50 Snaefell, 20s.; 50 East Bottle Hill, 4s. 6d.; 6 Hematite Iron Ore Company, £3 (fully paid); 5 Wheal Jane, £7; 5 Leeds and St. Aubyn, £5; 20 Cardigan Consols, 35s.; and is a BUYER or SELLER of Wh. Alice Alfred, West St. Ives, Budnick Consols, and Rose and Chiverton.
I believe there never was a time in the history of mining requiring more caution, sound, honest, and practical experience to be brought to bear on this class of industry in defence of legitimate undertakings than the present, and from the long experience I have had, both in the mines of Cornwall, and in London, and being in daily communication with reliable practical authorities from the best mining districts, I flatter myself in giving sound advice to my clients. As worthless projects are being abandoned, sound legitimate undertakings are sought out. I have at all times a selected list of shares in honest, well-conducted mines, which I can recommend with confidence both for investment and speculation. I am also in a position to advise as to those of not so encouraging a character, and will, therefore, pledge myself to do the best in my power for all who may be pleased to favour me with their orders.
Advice given on the sale or purchase of shares.
Eighteen years' experience in Cornwall and thirteen in London. 46

Original Correspondence.

COAL MINES INSPECTION.

PROPOSED NEW GENERAL RULES BY INSPECTORS, AND INCREASED SAFETY IN COAL AND IRONSTONE MINES.

[*Continued from last week's Journal.*]

To understand this matter fairly, the causes—real, probable, and possible—of explosions requires to be clearly understood, and at the risk of stating what everybody think they know, I will endeavour to explain them. To cause those calamities, two things are indispensably necessary:—1. The presence of an explosive atmosphere; and 2, its coming into contact with naked flame or its equivalent.

I say an *explosive atmosphere*, because the fire-damp of coal mines—the byhydruret of carbon of chemists—is not of itself explosive until mixed or mechanically combined with or diffused throughout the ordinary atmosphere of the mine in definite proportions. It becomes *more* or *less* explosive as it is mixed with the mine atmosphere; when it forms 1—31 to 1—15, or from 3·22 to 6·6 per cent., of the atmosphere it does not explode; when 1—14 its inflammation extends throughout the gaseous mixture without loud detonation or violent explosion. The rapidity of inflammation increases to a certain point with the proportion of fire-damp one-ninth or one-eighth, or 11 to 12 per cent., forming the most highly explosive mixture. With a further increase of fire-damp the mixture becomes less and less explosive, until it is 14·3 per cent., when it ceases to be so; when the mixture contains more than 1—5, or 20 per cent. of fire-damp, it ceases to be inflammable. This accounts for the difference in violence of explosions. The more nearly, up to a certain point, the quantity of air approximates to safety—but is still deficient—*by rendering harmless the noxious gas, the more general, extensive, and destructive is any explosion of such mixture.* From 7 to 11 or 12 per cent. the violence of explosion *increases;* from 11 or 12, or 20 per cent. of fire-damp, it *decreases*, and beyond 20 to 33 per cent. it *ceases* to be explosive for want of atmospheric air, or, more correctly, oxygen. It also gives us a measure of the quantity of air required for the safe ventilation of a mine. I believe at the Oaks Colliery, since the shafts were sealed, the discharge of fire-damp through a pipe inserted for the purpose in the scaffold has not averaged more than 500 cubic feet per minute; but suppose it to have reached twice this, or 1000 cubic feet per minute, it would have rendered a current of only 10,000 cubic feet per minute highly explosive, but would have been invisible on account of 30,000 cubic feet per minute, whilst the quantity of air in circulation in that unfortunate mine was proved at the inquest, by records kept up to within a few days of the explosion, to have been more than *five times* this quantity. *This simply proves what is well known, that the ventilating currents of a moderately well-aired mine never reach anything like an explosive condition. It is not so much increase of quantity of air that is required at the present day, but a more perfect and permanent application and distribution.* There can be no question that the *ordinary* discharge of fire-damp in our worst mines is not at all an unmanageable quantity if ventilation can be applied at the proper place.

There is one point worthy of special notice—the effect of a mixture of carbonic acid with an explosive atmosphere. On mixing one part of carbonic acid with seven parts (or ⅛ or 12·5 per cent.) of an explosive mixture of fire-damp, its power of exploding is destroyed. It would be an immense boon to the mining interest if a *reliable* fire-damp and carbonic acid indicator could be invented. It appears great disappointment has resulted from Ansell's not being so. We must not, however, give up the hope that something of the kind will yet be discovered.

An explosive atmosphere may be formed in a mine yielding fire-damp through deficient or defective ventilation, or from a sudden issue of a considerable quantity of air.

Where the part of the mine is accessible deficient ventilation should not exist, because it is clearly unnecessary when only the common or usual mode of discharge of fire-damp exists. But the difficulty is where the gas is generated in parts absolutely inaccessible, in the goaves or parts where the coal is entirely extracted. These parts always have been, and will be, the sources of greatest difficulty and danger. There is the greatest possible difficulty in preserving air-passages around thin edges, and to do so across them, except where of very limited extent, is an impossibility.

Deranged ventilation arises from the air not being *maintained* in the proper direction, or in sufficient quantity through obstructions in the air-passages, arising from the falling roof. In passages through the coal they can be avoided or remedied, but where they pass along the margin of goaves it often becomes an impossibility, and where such air-passage *is the only one*, as is generally the case in long wall working, the current of air is unavoidably restricted. This is a very great objection to long wall working in fiery mines. It is also often found difficult or impossible by this mode of working to avoid doing so along the higher levels of such goaves, and in doing so, where there is a considerable inclination of the bed, accompanied by a considerable discharge of gas, it is almost an impossibility to keep the working face, or close to it, free from gas. We have also another element of danger in the large masses of coal generally taken down at one operation, considerably restricting the air-passage along the benk faces. With a serious inclination, and the large yield of fire-damp, long wall working on the rise edges of the goaves is, without doubt, the most difficult of any other to perform with safety. A great defect, but not unavoidable, exists in not having air-passages between the edges of such goaves and the intake air-currents, where naked lights are used, as is very generally the case in this mode of working. It is a very important consideration, and I believe it is a fact, that sudden issues of gas in connection with goaves is more frequent in long wall than any other mode of working. If this be so, the conclusion can scarcely be avoided, that it arises more from the mode of working than from any special condition of the fire-damp in the strata. If this be so, it points clearly to the remedy—surround such goaves by return air-courses, and work in the lower instead of the upper edges of such goaves; this will prevent large accumulations of fire-damp within the goaves, and if by the sudden settling of the roof, or even a reduced atmospheric pressure coincident with a fall of the barometer, an unusual quantity of fire-damp be given off, *it will be discharged into the return air-courses instead of the working faces.* The great point to aim at is to *drain* off the gases from the higher edges of such goaves as it becomes disengaged from the strata, so as to prevent its accumulation to the utmost possible extent, and to remove the ordinary working operations to the furthest possible distance from this, its natural place of discharge. With goaves so arranged and ventilated the unavoidable danger connected with them is reduced to a minimum, *and, further, what is very desirable is the almost certain result* that in a few years, probably within five, such goaves will be gradually and thoroughly drained and exhausted of fire-damp, and that it will be followed by the discharge of carbonic acid gas, which, as has already been shown, when mixed with the most explosive atmosphere to the extent of 12½ per cent. renders such completely inexplosive.

This is not science or theory alone, although it is that most correctly, but it is also the result of practical experience. I have seen goaves which for two or three years after their first formation yielded fire-damp most abundantly gradually cease to do so, and ultimately it became succeeded by a discharge of carbonic acid gas, so pure that it would extinguish flame as suddenly and completely as if it had been plunged in the sea. If this state of things can be produced, or if it is a natural result, and can be aided or accelerated, it will have a most important influence in determining the extent to which coal can be worked, and the areas fairly available by a pair of shafts.

The principle of working collieries in isolated districts is a very old idea. It was practised upwards of 40 years ago by Mr. Buddle, and is in some cases practised to this time. It was, however, generally abandoned, more from a defect in arrangement than of principle. No doubt, if properly arranged, it would tend to restrict the area and extent of explosions, but if arranged on the plan adopted by its inventor it would increase the danger and effects of explosions. Any mode of isolating the workings of any given colliery must be under one certain condition. The workings and roadways must *diverge* from one common inlet, and *converge* to one common outlet; this is unavoidable. It is proposed by Mr. Wynne, in his special report, "that in all cases where new mines are driven into every 100 acres should be worked in separate pannels or sections, with not more than two roads through the separating 'rib,' which rib shall not be less than 20 yards (*thick*) between the sections." Does Mr. Wynne propose to have these ribs permanently? If not, it would be only a temporary separation; besides, I think his 20 yards ribs would be inadequate to maintain isolation between districts gobbed on both sides of such rib. I am confident that not less than 2-chains ribs would stand the pressure of such deep mines—say as the Oaks, which is 300 yards deep. This would involve leaving a serious quantity of the mine ungot. With a 2-chains rib 100 acres of workable area would require the sacrifice of 30 per cent. of the entire bed of coal, but reckoning only half of it due to each isolated pannel, which is too little, it would cause a loss of 15 per cent. of the bed of coal. This is a fact worthy the consideration of the coal question commissioners. But supposing one of these 100-acre isolated pannels, or a series of them, entirely worked out, and consequently of necessity and unavoidably charged with fire-damp—what Buddle called "capacious gasometers," "constantly charged with gas"—what state, condition, and prospects would such a "separate pannel" then present? If one of such, with the coal exhausted and charged with fire-damp, became ignited it would be like firing an enormous mortar fearfully charged, with two very short and comparatively small barrels, into the main highways of the colliery. We talk of the danger and risk of firing a large charge of powder in a hole in stone 4 or 5 ft. long at the Oaks Colliery, of Whitworth and Armstrong guns, but here is a "Wynne" 100-acre gun, with two 20-yard barrels, such as never before was dreamt of in this world. Could we get the Austrians into position before this gun, we should soon let them see what a contemptible enemy they had in the Prussian needle-gun. Mr. Brough recommends "something," it is not very clear what. "There must be some limitation to area," "persons employed," "few pairs or *more* pits," "something must be done." "All collieries should be pannelled, or arranged in such a manner that men in all the districts shall not be killed outright (has that ever occurred) when explosions happen to occur in any one particular compartment." This sounds all very well as a generality, or something to be wished for, but unfortunately "the pannels" have to be arranged "as may be found consistent with a free transport of the products to their corresponding and proper winding pits." Why, that is just the difficulty, *increased* by the fact that it is almost impossible to know sufficient of the circumstances of any bed of coal to enable such a plan to be arranged before the coal is cut up, or won out, to a considerable extent. If it could, the gun difficulty remains. I am sure it would be a benefit to the country if either of these gentlemen would form a definite plan, showing the arrangements in different stages, some of the districts ready charged awaiting the match, so that we could form an idea what this "something" really meant. The fact is, that the isolated pannel system is like *many very bad* plans of working pits; it is first-rate for a time, up to a certain point, and then it entirely breaks down, completely fails, becomes a disaster. No pannel, whether 10, 50, or 100 acres, could fail when entirely worked out to become what it is most desirable to avoid above all things in a coal pit—a highly-charged enormous gasometer, ebbing and flowing with every variation of atmospheric pressure, and liable at any moment to become the cause of a fearful catastrophe, beyond any hitherto known, induced to a great extent by its supposed security.

Restricting the area to be worked to a given number of shafts is also recommended. One Inspector says 200 acres to a pair, and one extra to every hundred additional. This is scarcely practicable with isolation. Is the 200 acres to be in one bed, 200 in half-a-score, or 20 in each, in such a case? Why not at once fix the number of persons to be employed in any one coal mine? Are all collieries to be made to conform to this, whether they yield fire-damp or not? Where is the line to be drawn? By whom? Seriously, if this were decided, what further need is there to expend the public funds on the labours of the Royal Commission? Would it not at once put the extinguisher on all future deep coal mining? This idea might be possible in the mining of 100 years ago, when half-a-dozen pits were sunk in every field, the depth at the time being measured in inches, where it is now feet or yards. In this age of development is coal mining to advance backwards? You talk of some persons being octogenarians, they must be patriarchs, and cling to the ideas of their youth, or, having succumbed to second childhood, revived the impressions of their infancy, doting on the happy days long, long ago. Increase inspection, lay down fixed general principles of safety, and let all coal mines conform to them, large or small, and let the best managed extend as far as they can, and let those improperly managed fail, as they ought, and close them. I may almost say, with truth, all the shallow coal of the country is won—there only remains deep coal to be had. There is very little unwon coal in the country under 300 yards deep. The Royal Commission are already trying to solve the question *of possible depths of working.* If the workings of a pair of shafts have to be restricted to 200 acres—or, perhaps, to 2000—they need enquire no further, for in such an event the question is solved—*there will never be another sunk to the depth of that of the deepest already working.*

But why all this outcry about restrictions in the number of workmen to be employed, the isolation of pannels, the area of coal to be worked to a given number of shafts, except as to the number of persons who actually suffered, is there any other reason for it whatever? Of course all this arises out of the two serious disasters of December last. As to that at Talke-o'-th'-Hill Colliery, we have it on the authority of the Inspector of the district, Mr. Wynne himself, that "it took place, not from any material defect of the provisions of the Act, but because of the first general, and several of the special, rules, already provided, having been neglected, the discipline of the mine having been most lax." As to the Oaks, we have it on the authority of Mr. Dickinson, "that no point has yet transpired at the inquest to which the present requirements of the law, including the special rules, which were in force at the colliery, did not reach, unless it be as to the system of working which has been practised in the principal collieries in that particular seam in the neighbourhood of Barnsley." And the Inspectors add that if the "system of working involves unnecessary danger," they have the power to arbitrate. They, however, very properly decline to give the opinion that the system of working did involve unnecessary danger, but if it did, why, then, let the system be altered. Carrying a system of working well adapted to shallow workings foul from fire-damp, into deeper workings yielding it freely, has produced bad effects before now. *If there is any one thing clear, as arising out of these accidents, and the joint and separate reports of the Inspectors, it is this*—THAT TO PREVENT THE RECURRENCE OF SIMILAR CALAMITIES, *more extended inspection is required, because it is "not from any material defect of the provisions of the Act," or anything which "the present requirements of the law" does "not reach," but because the law was simply not enforced, from a deficiency of the number of Inspectors.*

Seeing that some mines do suddenly yield large quantities of fire-damp, and that there is always a danger of its collecting amongst the ruins of the higher parts of the goaves, it is found a further means of safety to restrict the use of naked lights in coal mines. Where gas is met with it may be ignited in several ways:—

1.—At naked lights.
2.—At the furnace.
3.—By blasting the coal or stone.
4.—By a damaged lamp. [lamps.
5.—By igniting matches, smoking tobacco, or tampering with the
6.—By the gas containing, what is unusual in this country, olefiant gas, which explodes readily at red-hot iron.
7.—By spontaneous combustion of mineral.

The last having been considered impossible in the case of the Oaks by a most competent witness, and the sixth never having been discovered in the fire-damp of English coal mines, although it is said to prevail on the Continent, we will not further consider them.

As the Inspector states the rules were glaringly broken at Talke, we will not further refer to it, but will confine our observations to the Oaks, where naked lights or blasting were not permitted in the workings beyond the main intakes of the colliery, and where the return air did not go over the furnace. There is no proof that the explosion occurred from causes 4 or 5, and there was strong evidence that it did *not* do so at the furnace. There was evidence to prove that blasting was practised within 100 yards of the downcast pit bottom, in driving a stone drift, but the persons who examined the mine soon after the explosion unanimously stated their decided opinion that it did *not* originate at that point, nor at the naked lights on the main horse-roads. The general impression being that, as the colliery had met on former occasions with sudden outbursts of gas, such had been the case on this occasion, and that it had come into contact with a lamp accidentally damaged.

I will not pursue this further than to say that if it did not originate primarily from a large and sudden issue, it must have arisen from conditions which could not have habitually existed under a more rigorous inspection. It is well known that these sudden issues are special phenomena in coal mines, not at all the rule, but decidedly the exception, not one colliery viewer in the country out of a hundred having practically experienced any such thing. I certainly do not doubt that they do occasionally occur, and in collieries liable to them the most stringent precaution should be exercised, in excluding every class of naked light, including blasting the coal. But is there any reason to apply the same principles to collieries where for years the least symptom of such issues has not been met with?

The Inspectors recommend the following rule, No. 16, in their joint report:—"In all workings in coal where safety-lamps are used as the means of lighting, no blasting powder shall be used in such mine."

This is not very clear. Does it mean where safety-lamps are used in some parts of a mine that no blasting powder shall be used in working coal in such parts of such a mine, leaving it to be used where naked lights are used, or for blasting stone? I see in this rule a premium held out for the use of naked lights. Some people, for further security, will use lamps where others—say most others—would use candles. If by adopting this extreme precaution they are also bound to adopt a precaution involving a lesser amount of risk, then the probabilities are that they or their employers may insist on the use of naked lights to secure the use of powder, wherever such lights can be used without evident risk. And a person having some doubt as to the propriety of using naked lights may be tempted to their continuance to prevent his having to forego the use of powder; for it may be relied on that the compulsory abandonment of the use of powder will lead to unreasonable compensation being demanded by the workmen in consequence, not only where powder is required, but even where they at present never use it. It has not yet been proved that the use of powder under proper restrictions has caused any serious loss of life; it certainly seems to have had no part in the recent calamities. I must confess that, without some compulsory power as to the use of lamps, I think this rule will tend more to injury than benefit. More fatal explosions have arisen from the use of naked lights and safety-lamps in the same mine than from any other cause; and I fear this rule will perpetuate and extend this mode of lighting mines.

Had it been proved that large explosions generally occurred in the most extensive mines it would have been a strong argument in favour of restricting their area, but such is not the fact. Neither as to quantity of coal raised per day, or extent of workings, could either the Talke or Oaks Collieries be considered very extensive, not even to be compared with the many collieries in the North of England. The Oaks Colliery at the time of this explosion, in 1847, was a very small colliery. The same is true of Darley Main, Edmund's Main, Warren Vale, and Lund Hill; indeed, it is a proved fact that new collieries are generally the most dangerous.

I wish to remark that I do not in any way refer to the Inspectors as being either neglectful or deficient; on the contrary, from a more or less personal knowledge of the most of them, my opinion is the reverse. Nor do I advocate an increase in their number from any prospect of personal advantage, as I never have been an applicant for the position, and, probably, never will.

As to whether the increase of inspections should be by Inspectors or sub-Inspectors, I strongly lean to the opinion I have already given above, because I believe actual inspection would be more effective by chief and sub-Inspectors than by Inspectors alone, as at present. I am, however, free to confess that I have some little doubt of the influence of sub-Inspectors, without they were carefully selected from the best class of persons I have referred to, and, therefore, I have suggested the remuneration stated above, so as to make it a desirable position for the persons required to desire to obtain.

A COLLIERY VIEWER.

[*To be concluded in next week's Mining Journal.*]

ALGERIA—No. IX.

SIR,—Having given in former papers some account of the physical geography and geology of Algeria, it may not be uninteresting to say something of the inhabitants and their manners and customs, also to give some statistics of the cork forests, that from their peculiarities have long engaged attention. From having to enquire into the nature and value of different properties, we were brought into intercourse both with the native and settler elements of the community—for example, we visited the estate of Mr. Barnoud, on a concession called Barnoud, some three miles to the north of Elarouch, a village, or small town, on the road from the coast to the capital of Constantine, and 24 miles distant from the seaport of Phillipville. We were received by Mr. and Mrs. Barnoud with great hospitality. Mr. Barnoud was a fine, well-grown man, that brought to mind the old English gentleman, and from his genial greeting and frank nature we found ourselves at home at the first moment. Mrs. Barnoud was a stout, motherly, lady-like woman, and did all she could to make us comfortable. We dined at 7 o'clock, having, amongst a multiplicity of dishes, according to the French style, wild boar; this dish was roast, and we found it exceedingly good. We had various sorts of wine, and with others some very choice, the produce of the vineyards on the property, which as in duty bound we praised very much, and so far as I was concerned the meed of praise was conscientiously bestowed. After liquers, coffee, and a long chat we went to bed, beds being found for all of us, and we were a party of six, besides the driver, in the house. At 6 o'clock in the morning we were up, and coffee was served in a bower formed of creeping flowers or shrubs on the terrace before the front door. This was at the end of May last, and the shade in the somewhat warm atmosphere was very grateful. After partaking of coffee we took a long walk up the valley by the side of the River Safsaf. We first had to descend from the house by means of easy flights of steps from a perpendicular height of 180 ft., but formed artificially into an easy slope, through terraces of neatly-kept vines. At the bottom of the steps we turned to the eastward in the valley, amid olives and a variety of other beautiful shrubs and trees; through the branches and leaves of which the soft sun-light of the morning poured deliciously. At the end of our walk, which we continued in the same direction for about a mile by the side of the stream, the water being penned up occasionally by dams for driving the mills below, we came upon the track of the sanglier, or wild boar; the turf was freshly turned up for a great distance, showing that it was done but a short time previously, and, probably, the herd might have been disturbed by our approach.

All around us were grand fantastic hills of limestone, and the effect of the landscape was exceedingly picturesque. On returning to breakfast we examined the mills, driven by the power of the river, for grinding corn and pressing the olives. The corn mill was driven by means of a large water-wheel, 35 ft. in diameter; and the olive mill consisting of cones of stone some 20 in. diameter at the large end, coming to a point at the smaller end, rolled over a concentric circular incline, rising like a round buddle to the centre, crushing the olives in their progress; these rollers were driven by means of a turbine, which performed its work exceedingly well, and it was said that it was an invention that either was or had to be patented. The pools formed by the river on escaping from the machinery contained a large quantity of fish, of from 2 to 4 or 5 lbs. weight, but we understood that these were not very good eating. We then went through a beautiful garden, just below the mills, and in the valley in front of the house; in it we found large orange and lemon trees, full of luscious fruit, a very pretty pagoda-like little house, with a fountain, and where the water issued there was a marble slab, with Mrs. Barnoud's name engraved on it, and a short sentence, intimating that the garden belonged to our amiable hostess. We then ascended the steps to breakfast—and such a breakfast, consisting of, I should say, 20 removes of dishes of the most delicious viands and cookery that it was ever my good fortune to partake of. It is difficult to imagine how an Englishman, used to his ham, chop, or steak, could by any possibility ever get through the numerous dishes of such a breakfast as this, but with the jokes of Mr. Barnoud, and the smiles of his good lady, we

certainly did contrive to pass this ordeal without any alarming consequences. A short time (say half an hour) after breakfast, allowing a little time for the *cafe noir* to digest, we were on horseback, and rode for many hours over and around the grounds. There were abundance of sheep, with Arab shepherds, and herds of cattle, but the most valuable and predominating feature of the estate was the beautiful olive trees, which grew everywhere in abundance; in fact, the whole surface of the land, at moderate distance with regard to order, I should think not planted, but growing naturally, was filled with them. These consisted of the bearing olive grafted on the wild and, I believe, other stock, full of fruit, and evidently very lucrative to cultivate. We found that the produce of the grape in this beautiful estate, which in its configuration is not at all unlike Hafod, in South Wales, is worth 1400*l.* a year. We found that the engineers were levelling a line just behind the house, for diverting the River Safsaf for supplying Philipville with water; this watercourse will be of great utility in irrigating, not only this, but all the various estates and farms along its line. We found the principal part of the estate rested upon a blue schist, traversed by quartzose lodes; we examined them, but found no traces of any valuable metal in them, although they contained a great deal of pyrites. Nothing could be more courteous than the hospitality shown to us, and it is a fair specimen of the kindness and politeness of the French in Algeria.

COPPER MINER.

FOOT-BRIDGES OVER STREETS.

SIR,—Having seen, in the Journal of March 9, the notice respecting Foot-bridges over Crowded Thoroughfares, I beg to call your attention to a model which I had made some time ago, and presented to the Corporation of London, but finding they did not care to go into the matter, I had it sent to the Polytechnic Institution, where it now is, and where it will remain for the inspection of those who may be interested in the safety of foot-passengers. I may state that the principle of my proposal is to have bridges of light iron, crossing and spanning the crossings at the principal thoroughfares, where there is so much difficulty at present at different hours of the day in getting across, these bridges to be reached by circular stairs, placed at the corner of the streets, each tower to have two stairs, and each bridge divided, so that there would be one way of ascent and another of descent, to prevent interruption. An octagon tower in the centre of the bridges to be the point of divergence to the other sides or corners of the streets. The height of this tower would be about 24 feet from the ground, and the circular stair-towers from 12 to 18 feet, according to circumstances; check-bars would be placed at the descending stairs, and at the ascending entrance at the tower, so as to prevent access to these, and allow passengers to go only by the right-hand passages and stairs. I should feel obliged if any of your readers will kindly examine the model, and if pleased with it, notice it, and the necessity for something being done for saving the lives of many of those who have daily to run the gauntlet of cabs and omnibuses.

Sudbury, Derby. GEORGE W. HAY.

THE HISTORY OF MINING, ANCIENT AND MODERN.

SIR,—A few days ago I received a letter from an eminent clergyman, well known in the paths of literature and science. His remarks were of such a nature as to make them suitable to send you for insertion in the Journal:—

"I feel very much the want of a book on subjects connected with mining, that should have a chapter upon such parts of the subject as the following:—

The Antiquity of Mining, and its First Efforts.
Some account of the Earliest Mines, with their Names and Situations.
Progress in Mining, as connected with an Advanced Knowledge of Geology.
Explanation of Terms, and how to understand Mining Reports.
Some account of the Origin and Progress of the best Dividend Mines, past and present.
The Cost-Book System, its Antiquity, its Merits and Defects, as compared with the Limited Liability System.
Mines as Investments.—Bulls and Bears.—Advice to Novices.

Your communications to the Journal, and your 'Guide,' would furnish matter on some of these subjects. The whole should be comprised in a single treatise, and published in a small volume, which might be procured at any time. It may easily be made as interesting as it would be useful. Its scope and object should be efficiently and plainly described. I have no doubt it would command a large sale, and I wish you could be induced to undertake it."

Now, Mr. Editor, you will probably agree with the saying of the Wise Man—"Of making many books there is no end." A "large sale" is not always certain, and the publishers have a knack of their own, in obtaining nearly all the profit. I am convinced that it would ensure a wider publicity, and effect more extensive good, were these topics to be treated of in the columns of the Journal. I shall, with your permission, address to you a series of letters on the subjects referred to by my reverend friend. I am afraid, however, that I must not attempt an essay on "Mining Reports made Easy," either for the reverend gentleman's own edification, or of the "novices" on whose behalf he seems so interested. However, the topics he mentions, and the order he puts them in, afford scope for useful remarks in the columns of the *Mining Journal*. THOS. SPARGO.

Gresham House, London.

SUCCESSFUL MINING IN CORNWALL.

SIR,—In two of the most celebrated districts in the county of Cornwall, and adjoining each other, are two of the oldest and most famous tin mines of the present day, but varying greatly as to the geological nature of the strata—the Trumpet Consols, in the parish of Wendron, are entirely in granite, while Wheal Vor, in the parish of Breage, is in clay-slate (schistose rock), commonly known as killas. The former mine was discovered in the early part of this century by the late Captain Thomas Teague, who realised a large fortune out of it, at the then low price of tin, which enabled him to carry on, and discover the great riches in Tresavean Mine, which yielded upwards of 60,000*l.* a year profit (dividends) for several years. Wheal Vor, to the west of Trumpet Consols, is situated in a valley between two granite hills. The old mine was discovered by the late Mr. John Sundry about the year 1813, and wrought to the depth of 300 fms., or 600 yards, below *the surface*. This mine returned during the first 30 years of its working about 3,200,000*l.* value sterling in tin ores; during this period the price of tin averaged from 35*l.* to 40*l.* per ton. These gentlemen were well known as two of the most enterprising and successful men of their day, and found employment for a multitude of labourers of every description, and, with the great houses of Messrs. Williams and Co., carried on some of the most extensive and profitable mines in Cornwall. The whole of the mines wrought by them, as well as a vast number of others, were worked and conducted on what is called the Cost-book Principle.

No pursuit has been more depressed than mining during the last three or four years, owing to the disturbed state of the commerce of the world. Copper fell from a standard of 148 to 95, and tin from 90*l.* to 42*l.* per ton of the ore (black tin), which caused a panic in the great bulk of all mining property, as a matter of course. Most of the limited liability companies fell victims to a change of circumstances, which clearly shows that the principle has not worked well, and from the fact that there are at present about 90, or nearly all, of these mining companies in the Stannary Court, under the Winding-up Act. No doubt but many promising mines fell victims to the force of circumstances, and others having been suspended for a time, may, as trade improves, be resumed and carried on again successfully, so that patience may be truly said to be amongst the virtues. Until Devon Consols Mine was discovered many persons thought that that district had no more prizes, and until the recent improvement in Prosper United Mines the same was said of the Marazion district, and until Alfred Consols was discovered people were hard of believing that any good could come out of the neighbourhood of Hayle; there may be as good fish in the sea as any hitherto found. There is a district to the east and south of Prosper United Mines containing a vast number of parallel lodes of the greatest promise, and nearly all in whole ground, with the exception of two of these parallel lodes—the Owen Vean and Wheal Jewell lodes—out of some 20 lodes, running south of east and north of west, and several lodes in an easterly direction, also commonly known as standard lodes, one of which, called King's lode, in Penberthy Crofts, intersected the old lode, and contains a course of the yellow sulphuret of copper for 70 fms. in length, and lasted for 70 fms. in depth, which averaged about 15 per cent. for copper, and about 3 ft. wide. Wherever this lode was discovered in crossing or intersecting other lodes a large deposit of very rich yellow copper ore was invariably discovered, such as that in the Wellington part of Wheal Friendship, in St. Hilary; then at Trevarthen Downs Mine, then at South Prosper Mine, then at Wheal Jewell, near Marazion, all in the parish of St. Hilary; this latter mine yielded at the time it was wrought the richest yellow copper ore in the county, averaging from 15 to 20 per cent. for copper, and was wrought about 90 years ago to a shallow depth. It was here that Boulton and Watt erected their first steam-engine in Cornwall, and from this mine the same engine was taken to the Godolphin Mines, where the fortunes of many families were made, and laid the foundation of many houses and persons now possessing great wealth.

A CORNISHMAN.

MINING IN 1867.

SIR,—It cannot be denied that mining, like almost all other sources of wealth in this great country, during the last year has passed through an ordeal of no ordinary kind: it is, therefore, encouraging to see it, like the phœnix, emerging from the fire with new lustre on its plumes. I see from the reports of the Cornish mines that several of them are reviving, amongst others the much and deservedly famed Prince of Wales Mine, and good discoveries are noted in the older mines further westward. I have myself during the last month or two travelled through much of North and South Wales—at least, through the metal-bearing districts of this old mining country; and I noticed with pleasure that there is a considerable stir amongst the dry bones, and that honest mining is getting a push in the right direction. In the old but long-neglected county of Carmarthen I see that fresh ground is breaking on the great Nant-y-Mwyn lode, and what can be more legitimate than extending such workings as those of the Nant-y-Mwyn Mine, which have been found during past ages greatly productive for more than a mile in length? I see a company is forming, called the West Nant-y-Mwyn Extension Mining Company, a very good name, applied to a very fair mining object. There is no natural impediment to the continuance of the ore for miles further westward; the rock is the same, and the only apparent traces of division in the continuity of the ore-bearing strata are the puny fences made on the surface by man, and the efforts of man extend but a short distance below the surface in effecting geological changes.

In Flintshire I noticed the works of the Golden Grove Mine, an extension westward on the great Talargoch lode. I shall be much disappointed if these new trials do not lead to a deposit of ore that will yield a quantity of money. In Cardiganshire there have been some bickerings as to lodes, that do not affect the real merits of mining at all, and yet they are calculated to work mischief, as to investors. I recollect, before Goginan was touched, in the present century, I stood on the out crop of the back of the lode with an excellent miner, and his observation was, looking at the great heaps of rubbish accumulated by the ancients, who would think that such a lode as this had turned out so much lead and silver ores? Look at the vein stone; it is dry, and slightly crystallised. There is no gossan, and the veins of silver-lead are so thin as to be mere films. No lode could appear less encouraging to the miner, and yet I saw under this poor-looking back, in the adit 60 fms. below, a course of ore 18 ft. wide, which continued for 60 fms. long, yielding 4 tons to the fathom, at present prices worth 17*l.* per ton, and which produced a quarter of a million worth of metal from above the adit. I know all the different mines in dispute, and if some have been depicted in too glowing colours, I think the mistake has been sharply enough corrected, and I believe there is real merit and tangible wealth in every mine alluded to in the untoward controversy. The history of the Cardiganshire mines for the last 30 years has been one of undeviating success, and the healthy progress of the whole has been assured. New mines are opening, with a vista of great future prosperity, as high as Plynlymon. Old mines have good discoveries, such as Darren. The only theory the public have to take care of is the management, and if they provide sufficient capital in those mountainous and picturesque districts, where it is a healthful pleasure to spend the summer months, they will not come away from them less rewarded than those London investors who have constantly trusted to the lead and silver lodes of Cardiganshire, Flintshire, and Carmarthenshire for the last quarter of a century. ESPERANZA.

EAST WHEAL RUSSELL.

SIR,—The letter of Mr. Tonkin, like his report, is a little too much overdone to be received by common-sense men. He certainly has given a very graphic description of his examination of the mine in the 140 fm. level; but, in his desire to represent the end extremely poor, he has made admissions the most damaging to his purpose. Every miner knows that in very soft and wet ground the effect of taking out a single breast-board would be to cause a quantity of soft muddy stuff to run down, and if not speedily stopped it may result in crushing up the timber, and losing the end altogether. If no such result should follow, the removal of this board would simply expose the width of the end for 8 or 9 in. high out of 6 ft., which is the height of the end. How, in such ground as this, Mr. Tonkin found it necessary to "dig and scrape the end and north side of the lode," or how, through so small an opening, he could possibly do so, I am at a loss to imagine. The end is driven up to the slide, and before the water was in, and the run took place, Capt. Richards tells us that he saw the lode east of the slide just in the back of the level, and valued it at 25*l.* per fm. This is corroborated by the men who work there, who call it a good lode of rich ore; but since the run has taken place the ground is so soft about the slide that the most carefully-chosen men for this kind of work cannot drive through it. Yet Mr. Tonkin would have us believe that he has succeeded in getting 5 or 6 ft. beyond this point, and there examining the lode.

The stuff washing out from between the timber, we are told by the agent, contains prills of copper ore, and when the ground is sufficiently drained I have no fear but that a good lode will be found. As to the north lode, if not a copper gossan, will Mr. Tonkin enlighten us as to what kind of gossan it is? One thing is certain, that rich stones of copper ore are met with in the 130, and a considerable quantity of native copper is disseminated throughout, leading many to believe that we are upon the eve of coming down upon a rich bunch of ore.

March 27. ONE WHO KNOWS.

[ADVERTISEMENT.]

GREAT LAXEY MINING CO.—AND ITS MANAGEMENT.

SIR,—In reading the report of the meeting of the Great Laxey Mining Company, which appeared in the Journal of March 16, I could not fail to observe certain statements made by Mr. Dumbell, the Chairman, in which he has very freely used my name, evidently not with the intention or desire of doing me any good, but, on the contrary, if possible, to do me a serious amount of injury; and this would certainly be the effect produced, provided such statements could be in any way substantiated, or be permitted to pass by unnoticed. I, therefore, consider under these circumstances I am fairly entitled to a small space in your next Journal in order to correct, or rather refute, those statements to which I refer, and of which, on account of their nature and untruthfulness, I have reason to complain. The first to which I will refer is in reference to the change in the management of the mines, as this is a question which concerns me most, being in so many instances placed before the public as the "manager" of the Great Laxey Mines during the time of its extraordinary development, and as I have always been recognised as such by the shareholders in the Great Laxey Company. If I were not the manager of their mines, not only they but the public generally have been grossly deceived, and I have, of course, occupied a false position, but beyond this I have no interest or ambition whatever, as it does not in the least affect me. The statement to which I refer is this—"That the actual management of the mine never was taken out of the hands of Capt. Rowe, and placed in the hands of Capt. John Kitto, and that the terms of Captain Kitto's agreement was that he was to be only an agent, to work with, and under, Capt. Rowe." Now, as Mr. Dumbell has referred to the terms of my agreement as a proof of what he states, I consider I have a perfect right to do the same, and will, therefore, take the liberty of copying an extract or two from the said agreement, which is dated Douglas, Feb. 15, 1864, and is as follows:—"That it appears advisable to the directors to make a considerable change in the management of the mine, as refers particularly to the working department, and with this view it determined that the working of the mine, with the ordering and directing of the men on the surface and underground, shall be under the charge of an agent *distinct* and *apart* from Captain Rowe, who, as manager, shall have the inspection and overlooking of everything, but without power to interfere with or control the agent beyond giving him advice; and in case of any dissatisfaction on the part of Capt. Rowe, he is to report the same to the directors. Capt. Rowe to continue to conduct the correspondence in connection with the disposal of the company's ores, but the shipping thereof, and the regulation of freights to be paid, to be under the charge of the agent, who *alone* shall have a right to take men on to the works, and discharge men from the company's employ at his discretion. That Capt. John Kitto having agreed to undertake the work, it is resolved that Capt. Kitto be, and he is hereby, appointed agent of the company, with a salary, &c. Three months' notice to be given by either party of their wish to determine the service.—Signed, G. W. Dumbell, R. Cochran, W. Beckwith." I determined this agreement by proper notice.

I have also a letter written by Mr. Dumbell in London, after the meeting of the Great Laxey Mining Company, held in March, 1864, in he states—"If I (mark this "I") had not made the change in the management of the mine previous to coming to London there would have been a *great disturbance* at the meeting." Now, Sir, I would ask in whose hands was the *actual* management of the mines? and after I had fulfilled the terms of the agreement referred to by Mr. Dumbell, how much of the actual manangement remained for Captain Rowe? In the next place, Mr. Dumbell states I never made a new discovery in the mine. My answer to this is very simple indeed, as one of two things must be admitted—that I must either have made some new discoveries, or otherwise must have shown them the way to make a proper and honest use of the discoveries they had previously made, as up to the time that the change of management took place, referred to above, the mine had not more than paid its working expenses, but from that time to the present have paid 30,000*l.* a year in dividends. How is this difference to be accounted for?

The next statement made by Mr. Dumbell was in reference to a cargo of ore reported by Mr. Bellamy to have been sold by the agents, and the proceeds misappropriated. Mr. Dumbell says, "When Mr. Bellamy was charged with it he denied having made such statement." My answer to this is, Mr. Bellamy did *not* deny it, but when charged with it by Capt. Rowe he acknowledged that he had made such statement; and although Capt. Rowe attempted to conceal the fact at the meeting, he afterwards acknowledged, in the presence of his brother and Capt. Evans, that Mr. Bellamy did say so. And as to my not calling the attention of the directors to these things whilst I was a paid servant of the company, I beg to remind Mr. Dumbell that I did call his attention (being Chairman of the company) to these and many other matters, nearly two years before I left the company's service, and the reasons for not enquiring into these things at that time is, of course, best known to Mr. Dumbell himself, and I will leave the public to guess. The next, and last, statement made by Mr. Dumbell to which I will at present refer is, "that the cost-sheets are always in his hands some days before the money is applied for to pay them." This I *positively* deny, and state, without the least fear of contradiction, that Mr. Dumbell never saw a cost-sheet previous to its being paid, and for the whole four years that I was in the company's service not one single cost-sheet was ever laid before or examined by Mr. Dumbell, or any other of the directors, until after they were paid; and I know for a fact that the same course is still pursued. So much for the statements made by Mr. Dumbell in his memorable and magnanimous speech of the 14th inst.; and as these, to which I have referred, are a fair sample of all that he said, the rest can, of course, be taken for what they are worth.

The statement made by Capt. Rowe, as to his having started the cross-cut to the east lode during the time I was laid up, is also void of the least shadow of truth.—*Shrewsbury, March* 28. JOHN KITTO.

THE PERRANZABULOE DISTRICT.

SIR,—Some time since a letter appeared in the Journal, describing a circle, with a run of valuable and progressive mines, in this district, and naming several in the centre, commencing with Great Retallack. I have much pleasure in stating that this mine is turning out to be far better than was represented by the writer, and it must be both satisfactory and gratifying to him, as well as to the shareholders, to hear of the discovery made. I am given to understand that the sett on the south boundary of the said Retallack (Wheal Thomas) is not yet working. In forming an opinion of this ground, I consider it is one of the best unworked setts in the district. The lodes are situated between two large elvan courses, and the Retallack lode crosses the first, and in a splendid valley intersects three east and west lodes in about 50 fathoms; this I consider quite sufficient to satisfy any person as to the value of this sett, and I am at a loss to find it is not working, well knowing it to be a valuable piece of mining property. Still further south is Wheal Albert, which sett embraces all the Old Shepherds east and west lodes, as well as several others of great promise. In taking a geographical survey of this sett, as well as others in the district, I think there are chances of a deal of mineral wealth, if properly developed, under the supervision of qualified men. At present this mine is abandoned, and I suppose the reasons are well known to the shareholders. To the western boundary of the sett is North Chiverton, the lodes from which run through the entire length of this sett, and being parallel lodes with that of West Chiverton, and situated in a splendid locality, with highly mineralised strata, and not far distant from the latter mine, I congratulate myself with the reasonableness of its becoming a valuable mining property. This mine is worked under the able management of Captain Hancock, who, in all probability, with a small capital, will bring it into a paying state, and ultimately we shall find it in the list of dividend mines. I have much pleasure in saying that the great hindrance is removed; and, in addition to this, the bottom levels are opening good tribute ground for lead, the blende disappearing, this being a good indication for a great deposit at a deeper level, which I would strongly recommend to be driven with all possible speed. From thence I go on to East Wheal Rose, where I find a company of gentlemen working on a lode 70 fathoms east of the old mine. This lode is parallel with Middleton's lode in the said East Wheal Rose, and being only a short distance off, the chances are a deal of mineral wealth. I congratulate the adventurers on their prospects, both towards the mine and management, and hope ere long to see a second East Wheal Rose, under the same management as at present. A RESIDENT.

FRONTINO AND BOLIVIA GOLD MINING COMPANY.

SIR,—Mr. Josiah Harris having repeatedly addressed letters to you, and to other public journalists, respecting the Frontino and Bolivia (South American) Gold Mining Company (Limited), I am desired by the directors of that company to state that it is their determination not to enter into any correspondence whatever, either directly or indirectly, with Mr. Josiah Harris, beyond saying, once for all, that most of his statements are untrue in fact, and the remainder are gross misrepresentations. Mr. Josiah Harris cannot have a legitimate object in view, because he held no interest in the company until a few weeks ago, when he laid out the large sum of *five pounds* in the purchase of 15 shares. His present interest in the company is confined to the said sum of 5*l.*, an amount which would afford no inducement to a man to take much trouble, and incur considerable expense, unless he had *other* intentions than the protection of his own property. Knowing how easy it is, in the present state of the law, for unscrupulous people, aided by equally unscrupulous agents, to make attacks upon joint-stock companies, the directors hope that the shareholders will feel disposed to enquire *who* are the parties instigating these attacks, and they are mistaken if such enquiries should inspire any confidence on their part.

The directors hope it will not be long before they shall have an opportunity of meeting their shareholders, to whom alone they owe, or will render, any account of their proceedings; and Mr. Harris, and those with whom he may be acting, may be assured that they mean to proceed in the discharge of their duties undeterred by his attacks. They will endeavour to protect the property of the company from the injury which he would inflict upon it, and they believe they shall satisfy the shareholders that they have performed their duty.

New Broad-street, March 28. HENRY L. PHILLIPS, Managing Director.

MINING, METALS, AND MINERALS—PATENT MATTERS.

By M. HENRY, Patent Agent and Adviser, M. Soc. Arts, Assoc. Soc. Eng.

The subject of Smoke Consumption, notwithstanding the numerous essays that have been directed to this desirable object, still occupies the attention of inventors, and a recent patent relating to this object has been taken by Mr. NEWTON, who proposes to construct an arch of brickwork, perforated with two or more holes, and to insert therein small pipes, which extend a short distance in the furnace. The outer end of these pipes he connects by means of branch pipes with an air tube, which tube is supplied with a current of air by the means of an ordinary fan. A valve is placed between the fan and the jets, for the purpose of regulating the admission of air.

The subject of Tin and Terne-Plates again appears in the list, a patent (No. 1902) having been taken by SAUNDERS and PIPER for these metallic plates. The inventors propose to proceed as follows; they take plates out of a cistern of water in which they are placed after the last "pickling," and they pass them singly through rollers covered with elastic material. The plates are nearly freed from water, and they are then placed in some greasy material or bath, which is raised to a high temperature.—Another patent has been applied for by Mr. S. C. SALISBURY relating to the metallurgical arts; it is numbered 652, and the title relates to reducing and refining ores, more particularly ores of iron, and converting iron into steel, and to apparatus for same.

M. BONNEVILLE has specified (as a communication from M. Petitpierre) an invention relating to steam-generators, consisting in an arrangement of tube in a fire-box between the generator and the cylinder, while a piston is used, by means of which a great volume of steam is obtained, and a great reduction of fuel.—Mr. CLIFTON, the ingenious patentee of the atmospheric churn, which attracts so much attention, has recently applied (through my agency) for two patents, one relating to refrigerators, ice safes, and preserving cabinets, and the other relating to coolers, food-protecting apparatus, and stoppers or covers applicable for the same, and for other purposes. Notice of the grant of his Indian patent for the atmospheric churn has appeared in the Government list.

Among recent Applications for Patents appear the following:—No. 657, TURNER, Stepney, composition for coating iron, stone, &c., to prevent oxidation and decomposition.—No. 680, WALKER and PYLAUM, Leeds, crushing stones, minerals, and other substances.—No. 692, HUGHES, London (communication from Hoedemaker, Antwerp), economising combustion of gas, petroleum, and other oils.—No. 702, BURT, Wandsworth, apparatus for moving mud, sewage, sand, gravel, &c. (communication from Burt, of Velsen, North Holland).—No. 732, LEE, Holborn, producing designs and characters on metal, &c.—No. 733, READ, Newton Heath, machinery for boring and excavating coals and minerals.—No. 737, BLAGDEN, Hackney Wick, extracting silver from alloys of zinc with lead (communication from Francisco Marquez Millan, of Marseilles).—No. 741, HAMER, Manchester, and DAVIES, Bowden, supplying heated air to furnaces and fires, and burning smoke.—No. 743, WESTWOOD, Bow, and BAILLIE, Leyton, protecting iron ships from corrosion, &c.—No. 754, HARPER, Derby, safety apparatus for mining cages, hoists, and lifts.—No. 755, LAKE, London (communication from Hardy Covington, United States), rotary-engines and pumps.—No. 762, GRUNDY, Wolstenholme Hall, preventing smoke.—No. 763, KENNEDY, Glasgow, annealing or treating cast-iron articles.—No. 765, CANHAM, Clerkenwell, sharpening knives, &c.—No. 775, NICHOLSON, London, grinding, graining, polishing stone, &c.—No. 789, ALLHUSEN, Newcastle-on-Tyne, treating small pyrites and pyrites dust to obtain sulphur.—No. 810, BISCHOF, Bonn, coating metals.—No. 813, STEWART, Glasgow, core bars and studs, for casting iron pipes and similar articles.—No. 814, Dr. MARCHISIO, isolating compositions for protecting metallic surfaces.

The following patents have been sealed:—SIEMENS, Westminster, smelting ores and furnaces.—UREN, Plymouth, dressing granite, &c.—DODGE, Manchester, iron tools.—SAMS, Aberdeen, strengthening and tightening wire.—DIXON, York, steam-boiler and furnace.—TURNER, Leeds, consuming and economising smoke.—STEWART and CHAPMAN, Lancaster, tools for drilling, &c.—JOHNSON (communicated from Henriette Delong), cutting frets in metal.—BAYLISS, Newport, iron.—VALENTINE and BENSON, Chester, melting and casting steel.—BENSON and VALENTINE, Chester, steel.—BENSON and VALENTINE, Chester, malleable iron.—BENSON and VALENTINE, Chester, iron and steel.—CALVERT, Strand, iron and steel.—VAN DERBURG, New York, artificial stone, cement, &c.

MARTIN'S PATENT ANCHOR COMPANY (Limited).—At a meeting of shareholders, it was resolved that the company should be wound-up voluntarily, and Mr. Edward Addis (Addis and Harris), Threadneedle-street, London, public accountant, was appointed the liquidator.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending March 24 was 9229*l.* 11s. 6d.

Meetings of Public Companies.

ECONOMIC LIFE ASSURANCE SOCIETY.

The annual general court was held at the offices, New Bridge-street, on March 23,—Mr. HENRY BARNETT, M.P., in the chair.

Mr. ALEXANDER MACDONALD (the secretary) read the notice convening the meeting. The statement of accounts for the year ending December, 1866, was as follows:—

GENERAL ACCOUNT.

Received—Assurance premiums	£214,661 15 0		
Less commission	7,478 14 5	£207,183 0 7	
Interest on investments	96,230 16 5		
Lest income tax	1,683 4 7	94,547 11 10	
Total			£301,730 12 5
Paid—Assurance claims			£253,160 1 0
Annuity claims			1,825 10 0
Policies purchased			7,270 14 6
Re-assurance premiums			324 16 4
Office expenses			10,284 3 11
Law charges			583 1 3
Medical fees			279 6 0
Balance carried to investments			28,002 19 5
Total			£ 301,730 12 5

ASSURANCE FUND.

DR.—Balance, Jan. 1, 1866, consisting of—			
Funded property	£ 452,106 8 2		
Loans on policies	110,776 10 0		
Mortgages	1,570,087 17 1		
Life interests	68,299 4 4		
Reversions	117,259 14 5		
Norwich Union Reversionary Interest Company on account	20,000 0 0		
Cash on hand and on deposit	31,502 5 8	£2,370,031 19 8	
Profit on reversions fallen in, &c.		5,745 16 0	
Balance from general account		28,002 19 5	
Total			£2,403,780 15 1
CR.—Terminable annuities			£ 924 0 0
Balance, Dec. 31, 1866, consisting of—			
Funded property	£ 482,801 3 2		
Mortgages	1,583,990 3 11		
Loans on policies	125,887 10 0		
Reversions	130,619 13 9		
Life interests	67,700 6 8		
Cash on hand and on deposit	11,857 17 7	2,402,856 15 1	
Total			£2,403,780 15 1

AUDITORS' REPORT.

Feb. 13.—We, the auditors of the Economic Life Assurance Society, having carefully examined the accounts of receipts, disbursements, and investments during the past year, and having compared the same with the vouchers produced, do report that we have found them correct.—JOHN G. STILWELL, JOHN HOWELL, HENRY ROBERTS.

STATEMENT FOR THE YEAR 1866.

Number of proposals received	553
Policies issued	447
Proposals declined	57
Not completed	49
Number of policies remaining in force at end of year	9308
Amounts assured thereon	£7,643,976
Absolute bonus	752,528
Total liabilities	8,396,504
Sums assured by new policies	378,570
Amount of new premiums	11,872
Total premium revenue	219,594
Invested capital	2,402,857

STATEMENT OF CLAIMS ACCRUED.

On 216 policies assuring 171 lives in the sum of 208,300*l.*, including bonus.

Out of 216 policies determined by death, 187, assuring 143,833*l.*, carried 38,849*l.* bonus.

The CHAIRMAN said, in moving that the statement just read be received and entered on the minutes, that it would not upon the present occasion be necessary for him to detain the court with any lengthened remarks. The figures submitted would enable the policy-holders to form for themselves a tolerable idea of the state of the business of the office, and those in the habit of attending the annual meetings would, doubtless, compare those figures in previous statements, and particularly those of last year. Upon the whole, the directors were satisfied with the business effected in the offices during the last year. As he had before mentioned in that room, it was observed that the state of commercial prosperity or otherwise throughout the country, and the state of the money market in the City, was always more or less a good index as to the state of the business of a life assurance office. As far as their experience went, the commercial depression that had taken place at the early part of last year had its marked effect upon the business of that office, as he believed he might say—at any rate, as far as common report went—had been the case with most other assurance offices. The directors of this society had noticed it in various ways—for instance, by the falling-off of proposals for large sums, in the number of policies purchased and lapsed, and also in the number of applications for loans upon policies. As to the proposals, the comparative statement was rather peculiar, for it seemed they had effected in 1866 a number precisely similar to that during the preceding year. The number of policies issued in 1866 was 427 against 466 the previous year; on the other hand, there were declined in 1866, 57, against 45 in 1865—the amount assured by those policies was considerably less than in the previous year, bearing out what he had just stated—the total amount being 378,570*l.*, while the average of each policy was 846*l.*, instead of 1028*l.*, a difference of about 182*l.* per policy. The new premiums amounted to 11,900*l.*, against 15,150*l.* the previous year; but the total premiums for the year were 219,600*l.*, against 218,500*l.*, showing only an increase in the total of 1000*l.* during the year—of course, that was accounted for by the fact that the amount of premiums of nearly 12,000*l.* was counterbalanced by premiums lost by death, and lapses of policies in different ways. That was a matter to be expected—persons would die, although they had insured their lives, consequently, premiums in that way ceased. The amount of claims accruing in 1866 was 216, against 270 in 1865, and the amount assured, including bonus, was 208,300*l.*, against 275,000*l.* in the previous year. Those satisfactory items gave the amount as only 600*l.* above that estimated, whereas in the previous year it was no less than 84,000*l.* At the last meeting he took the liberty of expressing a firm belief, based upon the experience of their office and the great confidence the directors had in the calculations of their actuary (Mr. Downes), that although in the previous year the amount was almost alarming, from the great excess beyond that calculated, yet that they would find a compensation which would set that right in the course of the average of years—that prediction had so far turned out to be strictly correct, inasmuch as they were now only 600*l.* above the estimate. Although he did not like to predict, yet, at the same time, looking to the experience of the office, which had been calculated upon very accurately, he felt confident that the amount would go below the estimate, and so make the average—which would be satisfactory—upon the calculations upon which the business of the office was based. (Hear, hear.) As to the bonus—which was a point upon which policy-holders looked for information, he found that the average bonus was 27 per cent., and the highest 118 per cent.; in the previous year the highest was not quite so much, being 114 per cent. As to the duration of life, it was, perhaps, remarkable that the average age of death was 57½ years, while the year previous it was 58 years. As to the new business, and the falling off in large assurances, they found that the policies for 5000*l.* and upwards were only 15, against 27 the previous year; but, on the whole, he considered the directors might honestly say that the business of the office had been satisfactory, and that it had been steadily advancing, although there were sure to be some circumstances—and, therefore, they must expect them—from year to year that affect their business one way or the other, such as the state of the commercial prosperity and the growth of wealth in the country. But, taking the whole state of their accounts, it seemed to lead one to the conclusion that the Economic Society was, at least, doing as well as their neighbours, and progressing in a manner that was perfectly satisfactory to those holding policies in the office. The total assets amounted to 2,403,000*l.*, and in 1865 to 2,370,000*l.* The balance of the receipts and payments was less than it was sometimes, but they had discounted a large amount of claims; therefore, the balance had naturally been reduced to that extent. The result of the actual payments over the claims during the last year would, on the other hand, show itself in the reduced amount to be taken out of the funds this year, and they hoped to see a large amount, therefore, added to the assurance fund at the end of the year 1867. The gross income amounted to 320,000*l.* Upon that point he (the Chairman) might mention the directors had steadily borne in mind that it was their duty to take advantage of the state of the money market and the general rise in the interest to make their investments upon the best terms they could with safety to the office. In the course of the last two or three years—since the last quinquennial general meeting—they had added to their income 900*l.* per annum, by an increased rate rate of interest upon the funds invested. (Hear, hear.) The liabilities were 7,644,000*l.*, to which a large bonus was to be added—making the total 8,390,000*l.*; the total assets were 2,403,000*l.*, which showed the large proportion of one-fourth of the total liabilities—a proportion which was regarded as not only very satisfactory, but also as favourable as any assurance society could show. (Hear, hear.) At their last meeting some suggestions were made with regard to making the society more widely known by advertisements. In accordance with that suggestion the directors, who had previously come to the conclusion, upon the best evidence they could obtain, that the process of advertising was not satisfactory, had taken means to inculcate through the medium of different periodicals and publications no less than half a million of the society's prospectuses, at a cost of about 600*l.* The directors would not hesitate to go further in that direction if they thought it advisable; but they were bound to say that, although they had noticed some results—because the form of application for proposal was thus circulated—the effect, on the whole, was not perfectly known; but they would watch the matter carefully, and proceed in the same direction as far as they could, without throwing away the money of the society. (Hear, hear.) He would suggest that where all persons were commonly interested by participating in the profits that they should be the persons, as far as they could, to circulate the "economical" advantage of the Economic Society. (Hear, hear.) There was no one present, he was satisfied, who—with the directors—could not confidently recommend the "economic" advantages of the Economic Society, and, at the same time, in doing so they would be promoting the prosperity of the office. (Hear, hear.) With those remarks he would conclude by proposing that the balance-sheet and statement submitted be received and entered on the minutes.——Mr. RICKARDS had much pleasure in seconding the proposition.

Mr. CURTIS was still of opinion that a little money expended in judicious advertising could not fail to bring a certain amount of business.——Mr. CHARLES COOK thought the best way of advertising would be to publish in the newspapers a full report of the proceedings of the annual meeting. As to the higher rate of interest obtained upon their investments, he would ask what descriptions of securities were held?——The CHAIRMAN said the securities held were chiefly upon mortgages. Loans were granted to public boards, who borrowed money upon the security of rates. Those securities paid 5 per cent., and the money came in periodically under Acts of Parliament.——Mr. COOK had merely put the question to bring out the answer, for he had not for one moment supposed the directors would lend money recklessly in order to get a high rate of interest, and that it should be known that those who wished could at all times borrow money upon their policies.

Mr. DOWNES (the actuary) in reply to a question, stated that the item of 20,000*l.* or the Norwich Union Reversionary Interest arose thus—the Economic Society purchased the business of that office, but in conducting the purchase certain delays occurred in completing the security. In order to meet the requirements of the shareholders of that society, and to prevent their dividend being delayed, the Economic Society advanced 20,000*l.* on the security of vested deeds, pending the investigation. That had been completed, and the loan of 20,000*l.* came back.

The CHAIRMAN, having put the question, the resolution for receiving the balance-sheet and ordering it to be entered on the minutes was put and carried. The award to the auditors of 160*l.* for their services during the past year was passed. The auditors were re-elected.

The CHAIRMAN wished before the meeting separated to state that the question as to the extent to which the directors were justified in going with reference to advertising expenses was very much for the policy-holders themselves to determine; but the directors, acting upon their "economic" principles, had been very cautious about expending what they found from their own experience not to be very fruitful. At the same time, he was fully aware there was such a thing as bad economy—that money might be withheld, and so prevent its being fruitful; but the directors would keep the subject in mind, and would not hesitate to employ money in that direction when it could be done with success.

A vote of thanks was passed to the Chairman, directors, actuary, and secretary for their services during the past year.——The CHAIRMAN, having acknowledged the compliment, said they all had but one common interest to serve. They were all largely interested in the society, and the mutual principles under which they were happily established made them in duty bound to work in one common cause. He hoped they would for many years continue to meet under the same satisfactory circumstances as at the present time.

The meeting then separated.

MWYNDY IRON ORE COMPANY.

The annual general meeting of shareholders was held at the offices of Messrs. John Taylor and Sons, Queen-street-place, on Wednesday, Mr. CHARLES CAPPER, M.P., in the chair.

Mr. N. M. MAXWELL (the secretary) read the notice convening the meeting. The report of the directors stated that the receipts for the past year have amounted to 21,928*l.* 13s. 9d. The expenditure has been 17,527*l.* 19s. 6d., leaving a profit of 4400*l.* 14s. 3d., out of which interest upon the mortgage amounting to 1499*l.* 11s. 8d. has been paid, and the balance of 2901*l.* 2s. 7d. has been carried to the profit and loss account, increasing the amount to the credit of that account to 3350*l.* 3s. 6d. The directors cannot on the present occasion recommend a dividend out of this sum, but that it be applied with the current profit now making to the payment of the next instalment of the mortgage which falls due. The serious effect which the panic of last year exercised upon the iron trade led the directors to the determination of reducing the yield of ore, and realising the large stock which they had on hand. They accordingly discharged a considerable number of the men employed, and in consequence the yield of ore for the twelve months has been decreased by at least 10,000 tons; had the trade been better, and this ore returned to market, a profit exceeding that of last year would have been reached. The policy of the company has been to keep down the expenses, but not to neglect the development of the mine. The works of opening have been vigorously proceeded with, and when the time arrives that a better demand may be had for the ore large profits will be realised from the outlay made during the past and preceding years. The mortgage debt is now reduced to 25,000*l.*, a further payment of 5000*l.* will be due at the end of this year, and the funds in hand will be sufficient to meet this payment, and it is to be hoped, with the addition of the profits for the current year, enable the directors to recommend the payment of a good dividend at the next meeting of the shareholders.

The report of Messrs. John Taylor and Sons stated that the quantity of ore raised during the last year was not equal to that of 1865,—not from any falling off in the capabilities of the mine, but from the want of demand for this description of produce. The comparative statement has been continued from former years, and shows the following results:—

	Costs.	Tons raised.	Money receipts.
1862	£14,150 6 1	27,714	£17,016 14 5
1863	14,370 4 2	35,381	17,775 6 10
1864	19,433 18 9	50,401	23,128 14 5
1865	19,962 16 8	50,654	24,685 7 9
1866	17,527 19 6	41,351	21,928 13 9

A nett profit was made, after payment of the interest upon the mortgage debt, of 2901*l.* 2s. 7d. The report concluded by expressing a full conviction that the mine will continue to produce large quantities of ore at a moderate rate of cost for many years to come.

The CHAIRMAN moved that the reports and balance-sheet be received and adopted. The position and prospects of the undertaking were so fully set forth in the several reports submitted to them that nothing was left for him to add upon those points. He need hardly state that, in common with most other branches of enterprise, the iron trade had been excessively bad during the past year. They had felt the wave of the panic, and, in consequence, had been reluctantly compelled to reduce their scale of production, which accounted for the fact that, as compared with the preceding year, the quantity of ore raised during the past 12 months was reduced something like 10,000 tons. Those familiar with such operations did not require to be informed that, although the rate of production might be reduced, the fixed charges remained unaltered, and that, therefore, the proportion of profit was reduced in a similar ratio. The company was in a healthy and sound position, and as the iron trade improved, which might be naturally looked for contemporaneously with an improvement in the general condition of the commerce of the country, the remunerative position of the Mwyndy Company could not fail to participate in the improvement. Mr. Taylor, who was present, would gladly acquaint the shareholders with reference to any particular point upon which they desired information.

Mr. TAYLOR stated that the directing managers had, in their report, given the result of the past year's operations, and it had been seen by Capt. Vivian's report that the deposit of ore appeared to have entered completely into the limestone. This was a changed feature, but whether it was for good or for bad they could not at present say; but they knew that in the neighbourhood there was a mine that had been working for a century, where the ore was surrounded, so to speak, by the limestone, and was worked almost like a honeycomb. During the last year the quality of the ore had been rather better than in former years; the quality was sufficiently good to command a sale during periods when the iron trade was ordinarily brisk. The shareholders were aware the iron trade had been depressed for some time past, and it was so still. There seemed to be no doubt entertained by those better acquainted with the subject than himself that the iron trade would improve as the financial affairs of railways were brought into a more satisfactory position, for then they would be able to maintain their present works in an efficient condition, finish uncompleted works, and extend their operations generally. The mine had produced a considerable quantity of ore last year, and would have produced more had it been required. They had deemed it wiser to reduce the number of hands than to increase the rate of production, but he hoped there would be good reason to increase the quantity shortly. The Chairman had referred to the fact that the fixed charges did not diminish with the rate of production, nor did those charges increase in proportion to an increased rate of production.

Mr. BOWDEN reviewed the history of the company from its formation, and contended that the statement in the original prospectus, that "more than half of the shares had been subscribed for," was likely to mislead the public, inasmuch as those shares were taken by two of the vendors. He did not make those observations in any spirit of opposition to the company, but merely with the view to represent the public, and inform the directors of what was stated out of doors.

Mr. J. TAYLOR could not understand the statement of the hon. proprietor that the announcement in the prospectus was likely to mislead when the fact was that the gentlemen to whom he had referred had taken the stated number of shares and paid for them. He (Mr. Taylor), with those, paid their money for their shares, believing, as they still did, in the *bona fides* of the undertaking. They all knew now that they bought the property too dear, but it was purchased with their eyes open, without any sort of deception whatever.

A SHAREHOLDER could not understand what they, as shareholders in the Mwndy Iron Company, had to do with the public, or what was stated out of doors.——Mr. TAYLOR thought the hon. proprietor should also remember that Mr. S. Gurney had accepted shares in payment for his property, upon which shares there was a heavy liability in the shape of calls; and, furthermore, that those calls had always been punctually paid to the hour. (Hear, hear.)

The CHAIRMAN would suggest that the best way would be for the hon. proprietor to go to the company's office, and examine the whole of the documents in connection with the company from its formation, for that could not fail to satisfy him as to the perfect *bona fides* of the whole concern.

Mr. BOWDEN referred to the estimated yield of the mine, as put forth in the prospectus, and stated that not only had the yield been much below that calculated, but the cost of returning it had far exceeded the amount computed. He thought he had a right to ask for some explanation upon this point, and the mine particularly, as during the past year a better price had been obtained for the ore than at any former period since the mine had been in the hands of the company.——The SECRETARY explained that the item in the balance-sheet for the sale of ore included the carriage, which was plainly set out in the accounts, if the proprietor would examine them.

Mr. BOWDEN said that it appeared a profit had been realised throughout the past year of 2s. 1d. per ton more than during the previous year, and, under those circumstances, he should have thought it would have been the duty of the directors to have made large sales. He was aware they had been told that the unfavourable state of the financial world had affected the iron trade, but certainly the small difference that any increased sales they might have made could not have been affected by the crisis.

Mr. A. BROGDEN stated that when this company was started it was generally thought by those able to judge that it was going to be a valuable addition to South Wales, and it had proved so to a very great extent. He could not understand the remarks made by the proprietors in reference to the large number of shares taken by Mr. Samuel Gurney. Mr. Gurney had a perfect right to apply for as many shares as he pleased, provided that he paid for them. He (Mr. Brogden) was quite sure that Mr. Samuel Gurney's connection with the company was of a *bona fide* and straightforward character. (Much applause.)

A SHAREHOLDER: All those who knew Mr. Samuel Gurney could be of no other opinion.——Mr. BROGDEN said it seemed to him that the proprietor had lately bought a few shares, for the purpose of introducing a sensation speech, which he would, no doubt, be much gratified with when he saw it in print. One thing was quite clear that the proprietor was not seeking information, for he had not asked a single question, but contended himself making statements, the foundation for which rested only within his own imagination, since they had been so fully contradicted at this meeting.

The CHAIRMAN, in reply to a remark as to the market price of the shares, stated that that had nothing whatever to do with the intrinsic value of the property. From his position with reference to another company which had to do with the sale and purchase of shares, he could inform the hon. proprietor that the cost price of shares had nothing whatever to do with their value in the market. He could give 20 instances in which shares which he knew to be intrinsically valuable were being sold at prices which were perfectly ridiculous. At the same time, he might inform the hon. proprietor that the directors of this company could not in any way be responsible for the price at which their shares could be sold in the market, however much they might feel that the price was utterly absurd. He could only say with regard to himself he had never bought or sold a single share since the commencement of the company, and he could say the same with reference to many of his co-directors.

The motion for adopting the report and balance-sheet was passed.

The retiring directors were re-elected, and the appointment of Mr. Brogden as director was confirmed. Captain Richard Wilson Pelly, of the Royal Navy, was elected a director of the company. The retiring auditor was re-appointed, and Mr. Fletcher was appointed an additional auditor.

A vote of thanks was passed to the Chairman and directors. The meeting then separated.

RHENISH CONSOLIDATED MINING COMPANY.

A general meeting of shareholders was held at the offices, Austin-friars, on Wednesday,—Mr. PHILIP WRIGHT in the chair.

Mr. J. H. MURCHISON (the secretary) read the notice convening the meeting. The report of the directors stated that there had been a large increase in the returns of ore as compared with the previous year; that the Chairman and one of the directors had recently visited the mines, who were much pleased with the prospects; and that the board strongly recommended the shareholders to prosecute the operations with vigour, being, they believed, the soundest policy, and one that would lead to profitable results.

The report of Mr. Darlington (the consulting engineer) stated that there were several interesting points to prove, and that it must be borne in mind the expenditure had been incurred in the purchase and erection of the machinery, and but comparatively little had yet been done in opening the lodes.

The CHAIRMAN, in moving the adoption of the the report and accounts expressed his regret at the absence, through illness, of his fellow-voyager, Mr. Parke Pittar. He stated that the result of their journey had been, as was stated in the report, a full conviction that the prospects of the mines were even such as to encourage the shareholders. For some time past several of the workings had been in unproductive ground, but there were indications in very many directions of better things. Explorations had been made, which in some respects had not entirely answered the expectations which had been formed; but it should be borne in mind that these explorations had been very slight, while there was an extensive back ground and depth, which had not been touched. The character of the lodes, both in Christiana and Bleibach, was, as he was informed, peculiar, so that the miner might be within an inch of a profitable discovery and pass it by. There had been two or three pitches driven in spots which had been, as it were, accidentally discovered only lately; and these promised not only to increase in their yield, as had been shown by an estimate from their engineer, which gave only 3 tons per fm. in Pittar's shaft, while the report but a few days before of the mining captain made the yield 4 tons; but, in addition, the ore seemed to increase in quality and value. He would observe that the company had been working only three years and a quarter, for the first fifteen months of which time the whole expenditure had been on works necessarily of an unproductive, but not, therefore, of a useless character. During the two years, however, in which they had made returns it would be seen from the report that 5900*l.* worth of ore had been raised, while the balance of expenditure against receipts had in the last year considerably diminished. During this period, too, a large amount of dead work had been carried on, which might properly be looked on as capital expenditure, for it was essentially necessary for the development of the property, and would not have to be incurred again. He (the Chairman) then read an extract from a letter which he had received from Mr. Pittar, alluding to his illness, adding—"I much wish I could narrate to the shareholders the satisfactory result of my own impressions, and the confidence with which I shall meet the onerous calls that fall upon my shoulders, convinced that in due time, as the mines get developed, the said payments will yield very satisfactory returns." He (the Chairman) then alluded to the officers and agents the company had abroad, and stated that he believed they were faithfully served. The outlay on plant, &c., seemed to have been judicious, and the machinery to be in good working order.

The motion adopting the report and accounts was received and adopted.

The retiring directors and auditor were re-elected.

Votes of thanks were passed to Mr. Younghusband (the company's representative in Germany), and to Mr. Darlington (the consulting engineer).

A vote of thanks was passed to the Chairman and directors.

The meeting then separated.

CARNARVONSHIRE CONSOLIDATED LEAD MINES CO.

An extraordinary general meeting of shareholders (convened by requisition) was held at the London Tavern, on March 22.

Mr. HENRY MILFORD was voted to the chair.

Mr. CARPENTER said, as he saw Mr. Warton, the new secretary of the company—or rather of the committee of directors—present, he would ask him whether he was there to take minutes of the proceedings, and to discharge the other duties of secretary?——Mr. WARTON: Certainly not.

Mr. CARPENTER then said that he had, in conformity with the requirements of clause 53 in the Articles of Association, left with Mr. Warton, as the secretary of the company, 14 proxies, representing the holders of 935 shares, at 12 o'clock on the preceding day, and he now wished to know whether Mr. Warton had brought them to this meeting?——Mr. WARTON: I don't know anything about proxies.——Mr. CARPENTER reminded Mr. Warton that he (Mr. Carpenter) had himself taken the proxies to the office of the company, and placed them in his hands, telling him that they were proxies to be used at the meeting on the following day. Those proxies should now be placed in the hands of the Chairman.——Mr. WARTON: O aye; I have'nt got them—they're at the lawyers.——Mr. CARPENTER said this was all in keeping with the doings of those who called themselves directors.——The CHAIRMAN then requested that all persons who were not shareholders would leave the room.

Mr. WARTON said he was secretary *pro tem* of the company, and had been sent by the directors to protest against the meeting as being illegal.——The CHAIRMAN said he would receive his protest, if he would write it out and deliver it to him in proper form.——Mr. WARTON having written the following, handed it to the Chairman:—

"Carnarvonshire Consolidated Lead Mines Company (Limited).—As secretary *pro tem*, I attend by order of the directors to protest against the meeting, as being illegal.—D. H. WARTON."

The CHAIRMAN said he must now request Mr. Warton to withdraw; as he had protested against the meeting as being illegal, there could, of course, be no pretence for his remaining in the room.——Mr. Warton, evincing no disposition to withdraw, the Chairman insisted upon his doing so, adding that if he did not the members would adjourn to another room, and exclude him.——After a pause Mr. WARTON said, as the Chairman seemed determined not to commence business, he saw no good reason for remaining.

Two other gentlemen having entered the room with Mr. Warton, and it being found that they were not shareholders, the Chairman requested them to retire. One of the gentlemen stated that he was a short-hand writer, and had been sent there (with his assistant) to take a *verbatim* note of the proceedings, and he did not feel at liberty to retire unless he received the instructions of the directors to that effect.——Some altercation took place, the directors' short-hand writer insisting upon remaining, and the Chairman insisting upon his withdrawing; but ultimately Mr. Warton, the short-hand writer, and his assistant retired, as did also Mr. Lelean's solicitor.

The CHAIRMAN presumed they might now go to business. For his part, he should not have cared about all the gentlemen who had withdrawn being present, but he thought, as a matter of principle, no person other than a shareholder should be present. He then suggested that as they ought to have correct minutes of the proceedings at that and any other meetings that might be held, it was necessary that they should appoint a secretary, and proposed that Mr. Carpenter should be appointed the shareholders' honorary secretary.——Mr. HEWORTH seconded the proposition, which was put and carried.

Mr. CARPENTER having taken his seat as secretary, proceeded to read the notice convening the meeting, to the effect that in consequence of the directors having declined to convene a meeting upon the requisition (signed by shareholders holding not less than 1-5th of the capital), the requisitionists, by virtue of the Articles of Association, "do hereby give notice that an extraordinary general meeting will be held at the London Tavern, on Friday, March 22."

The CHAIRMAN said that, in default of the directors calling the extraordinary meeting, as required by the requisition, the shareholders, in the exercise of the power given them under the Companies Act, 1862, had convened the present meeting. The objects in view were plainly set forth in the notice, and, therefore, it was not necessary for him to state them.

Mr. CARPENTER said he had in his hand the opinion of counsel on a case submitted to him as to the legality and powers of this meeting, and as to the position of the persons who held any of the shares that had been allotted to Mr. Lelean and his nominees in part payment of the mines and plant; and as the committee of directors had been sending out at the last moment a circular to the shareholders, with the evident object of keeping them from the meeting, by representing that it would be illegal, and all resolutions passed at it inoperative, he thought he had better read it, inasmuch as it would show that the committee were as wrong in this as they had been in all other things they had done. The opinion obtained was that of Mr. Speed, of Lincoln's Inn, and was as follows:—

"First.—Looking to the Articles, has the meeting been properly convened—*i.e.*, by the shareholders other than the 4*l.* paid-up shareholders, or by the 4*l.* paid-up shareholders, or by the two sets together?—1. By the 35th Article, the holders of 1-5th of the capital may convene an extraordinary general meeting, and I think that until the shares allotted to Mr. Lelean under his contract with the company are declared invalid by the Court of Chancery they must be treated as valid, and the holders must be considered as entitled to all the rights of shareholders. It may be questionable whether 1-5th of the capital means 1-5th of the nominal capital or 1-5th of the capital paid-up, but I think it means the latter."

"Secondly.—Whether or not, seeing that the 4*l.* paid-up shares were allotted at the same meeting as the other shares were, and such 4*l.* paid-up shares were all duly registered in the then authorised registry of the company, they are perfectly good and valid until declared by the Court to be invalid, and the owners entitled to exercise all the rights of ownership, as if perfectly unquestioned and unquestionable, and, therefore, if Mr. Lelean, Mr. Carpenter, and Miss Webb, and all other owners of such paid-up shares are entitled to attend the meeting, move resolutions, and vote thereat?—2. I am of opinion that all the 4*l.* paid-up shares must be treated as valid until declared invalid, and that the holders are in the meantime entitled to exercise all the rights and powers of shareholders, and that Mr. Lelean, Mr. Carpenter, Miss Webb, and all other owners of such paid-up shares are entitled to attend the meeting, move resolutions, and vote thereat."

The CHAIRMAN said the shareholders had heard the purpose for which this extraordinary general meeting had been called, and why it had been called by some of the shareholders instead of having been called by the directors. They had also heard counsel's opinion as to the validity of the votes that might be given by shareholders holding shares that had been allotted to Mr. Lelean in part payment of the mine—that opinion was that all the votes were good, whether of one description or the other. He would not enter into the particulars of

the unfortunate dispute that existed between the directors and Mr. Lelean.——Mr. CARPENTER hoped the Chairman would excuse his interruption, just to say that there was no dispute between the directors and Mr. Lelean. It was a dispute between three of the directors who had been appointed by the board as a committee "to enquire" into the statements made by one of the three, but who, having been so appointed, took to themselves all the powers of the board as to the management of the mines and of the company; and, what was more outrageous still, had instituted Chancery proceedings without the concurrence or consent of the other two directors, who had protested against them.

The CHAIRMAN said he did not know all the particulars of the dispute; all he knew was that it was very desirable the dispute should be brought to a close, and that this meeting had been called to take steps for effecting that object. The resolutions which had been prepared for the meeting were now open for any shareholder to move. He might add, however, that they were not obliged to adopt the whole of them, or to adopt them without alterations. They might, in other respects, do as they pleased, and as they deemed best adapted to answer the purpose of the meeting.

Upon the proposition of Mrs. HUQUENIN, seconded by Mr. STAPLES, it was unanimously resolved—

1.—That the suit instituted in the Court of Chancery by James Major Darwent and others, on behalf of themselves and all other members of the Carnarvonshire Consolidated Lead Mines Company (Limited), other than such of the defendants thereto as are members, or represent members, of the said company, against Baker Lelean, William Carpenter, Samuel Henry Stevens, John Kitto, John Nancarrow, Charles Pierce, Edward Wynne Thomas, and the said company is not a suit for the benefit of the company, or of the shareholders therein, other than the defendants thereto; and that it is contrary to the best interests of the company, and of the shareholders therein, that such suit should be further prosecuted.

Upon the proposition of Mr. HEWORTH, it was further unanimously resolved—

2.—That in the opinion of this meeting it was inexpedient and wholly improper for James Major Darwent, Roger Fenton, and John Harrison Towle, three of the present directors of the company, to have instituted the suit against the said Baker Lelean, William Carpenter, Samuel Henry Stevens, John Kitto, John Nancarrow, Charles Pierce, Edward Wynne Thomas, and the said company, without the previous sanction of the shareholders, and that by so doing, and by the other steps they have taken, they have greatly jeopardised the best interests of the shareholders; and that they the said James Major Darwent, Roger Fenton, and John Harrison Towle do not possess the confidence of the company, and that they be, and they are hereby, removed from the office of directors of the company.

Mr. CARPENTER, in replying to a question, stated that counsel's opinion was that, by passing these resolutions, the shareholders would very properly throw the onus of carrying on the Chancery proceedings upon the committee personally, and not as directors.——Mr. STAPLES said that the shareholders had been compelled to adopt this course from the unwarrantable proceedings on the part of the committee of directors. The shareholders had not paid their money to have it squandered in useless litigation, but to develope a property which it was admitted on all hands was a very valuable one—which, indeed, had been proved by results.——Mr. CARPENTER, in reply to a remark as to the resolutions, stated that they were in the first instance prepared by one of the leading firms of solicitors in the City of London, and afterwards revised and corrected by counsel.

Mr. HEWORTH thought it was to be regretted that neither of the committee of directors appeared to understand anything whatever about mining, and that just as the property was proving itself to be more than had been represented the operations should have been so seriously retarded by such unhappy differences.

A SHAREHOLDER doubted very much whether, even if the whole of the board of directors had commenced this expensive litigation without the authority of the shareholders given at a special meeting convened for that purpose, the shareholders could not legally resist the payment of all costs in connection therewith; but the shareholders case was, that these costly proceedings had been commenced, and were being continued, without even the authority of the board of directors as a board, inasmuch as two positively protested against the proceedings. The shareholders had been informed that Capt. Kitto had such confidence in making the mines produce profits at once, that he had offered to continue the management of them, foregoing all payment for his services until the shareholders received dividends. It was the purpose of the committee, who had taken everything into its own hands, to depreciate the value of the property, and then followed Mr. Fenton's two notable letters, in which he contradicted all that the directors had published in the prospectus, by the shutting up of the mines. This was most intolerable. They either knew nothing about the management of the mines, which they were now leaving to be filled with water, while the machinery would be rotting, or they were deliberately destroying the shareholders' property. They should have some persons on the direction who were able as well as honest.

Upon the proposition of the CHAIRMAN, seconded by Mr. STAPLES, it was unanimously resolved—

3.—That the Rev. Benjamin Crompton and Baker Lelean, Esq., be, and they are hereby, appointed directors of the company.

Upon the proposition of Mr. STAPLES, seconded by Mr. CARPENTER, it was also resolved—

4.—That the directors of the company be, and they are hereby, required in the name of the company to defend the said suit, and to resist the claim of the plaintiffs therein to the utmost of their power.

A vote of thanks was passed to the Chairman, which terminated the proceedings.

GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND.

At the meeting of proprietors, to be held on April 3, the report of the Court of Assistants will state that the profits for the year ending January 19, after deducting everything chargeable against the same, amounted to 17,879*l.* 16s., and when from that sum is taken the debtor balance of 11,568*l.* 15s. 6d. brought over from the previous year, there remains 6311*l.* 0s. 6d. available for a dividend upon the preference shares. At the end of the year further reductions were made in the valuations of the saleable stocks, and also the sum of 1407*l.* 0s. 6d. was written off to suspense account, to cover whatever loss might arise from doubtful debts. These two precautions are believed to be sufficient, and the accounts, after careful investigation of the company's affairs, are presented with the fullest confidence as regards their accuracy and faithfulness. The works and mines have been maintained in an effective condition for anticipated future requirements, and in some respects their efficiency, especially in the tin-plate works, has been materially increased. The entire cost of such maintenance and improvement has been paid out of revenue. Throughout the year the copper trade has been in a very variable and uncertain condition, and at one time the market reached a point of depression unknown for many previous years; the tin-plate trade has fluctuated, but, on the whole, has been satisfactory. Owing to the high reputation in which the company's brands are held, a very fair business in both these branches of trade has been done. The bar-iron trade, which throughout the kingdom generally has for a long period been comparatively unremunerative, became in the latter part of the year excessively depressed, and with but little prospect of early permanent improvement. Under these circumstances, the Court of Assistants resolved to adopt the measure which they had long very reluctantly contemplated of materially contracting the company's ironworks. With this view they diminished and concentrated the production of pig-iron, and, as a preliminary to still further reductions, entirely stopped one of the large bar-iron mills. This very important experiment is being continued as cautiously as possible, and will, it is hoped, have a beneficial result. A third rail is being laid, by which Cwm Avon will in two or three months be in narrow-gauge connection with most of the principal home railways. The Court of Assistants acknowledge the high estimation in which they hold the services of Mr. Struvé. They recommend that out of the divisible profits of the past year a dividend at the rate of 2 per cent. upon the preference shares be declared, and be payable, as prescribed by the company's Act, one half in April and the other half in October next. When this shall have been paid, the arrear of dividend upon the preference shares up to Sept. 5 next will amount to 45¼ per cent., or 131*l.*6*5l.* 2s. 6d., payable out of future profits. The usual details will appear in next week's Journal.

THE LONDON STEAM COLLIER AND COAL COMPANY (Limited).—This company gives evidence of a prosperous future, which is indeed amply proved by the results of its past working, as shown by the directors in their report to the shareholders at their recent meeting. The accounts represented the result of the company's operations for rather less than a year at the colliery; for one year and four months at Keepier Wharf; and for about four months' working of the steamer Ludworth, and two voyages of the Thornley, the latter vessel not having passed into the company's hands until near the end of the year. The nett profits on these three departments of the company's business, after paying all the charges proper to each, amount to 12,031*l.* 7s. 11d. for the colliery; 4395*l.* 16s. 10d. for the wharf; and 178*l.* 1s. 10d. for the steamers, making a total of 16,605*l.* 6s. 7d. Against this total of nett profit there are, as per profit and loss account, the charges in London for interest, office expenses, directors' remuneration, and law costs; after deducting these, there remains a balance of 7825*l.* 16s. 3d. in favour of the company. Of this balance, 1051*l.* 15s. 9d. was paid to the shareholders as interest and dividend to Dec. 31, 1865, and June 30, 1866: 2000*l.* has been placed to a reserve fund to meet depreciation in the value of the plant of the company, having a sum of 4774*l.* 0s. 6d. at the disposal of the company at the present time. In dealing with this amount, the directors recommended that a dividend at the rate of 10 per cent. per annum be paid for the half-year ending Dec. 31, 1866, and an additional 5 per cent. per annum for the previous half-year, making a total of 10 per cent. for the entire year. This will absorb 2996*l.* 9s. 1d., and the residue of 1777*l.* 11s. 5d. will be carried forward to the credit of profit and loss new account. Viewing this as the result of the operations of the company in the first year of its existence, it cannot but be regarded as most satisfactory, and as a substantial confirmation of the expectations held out to the shareholders. The colliery has yielded 220,000 tons of coal, or an average of about 4000 tons a week, since it has been in the possession of the company—a quantity which, in course of time, as the workings are developed, will, probably, be more than doubled, with a material saving in the working expenses, while the quality of the coal is such as to place it in the first rank amongst the coals brought to the London market. That this colliery can be worked to a good profit is shown by the accounts, and, as it is probable the price of coal will advance considerably as time goes on, the shareholders have in this result both a guarantee of future profit, and an encouragement to push on the further development of the workings to the fullest extent in their power.

TRANSFER OF COMPANY'S BUSINESS TO NEW COMPANY.—Where a company is being wound-up compulsorily, the Court of Chancery has no power, under section 95 of the Companies Act, 1862, to authorise a transfer of the company's business to a new company, in consideration of the new company paying the debts of the creditors by instalments. This was the holding of the Master of the Rolls, in *re* the General Exchange Bank.

PROSPECTUSES.—In *re* the Peninsular, West India, and Southern Bank (Dixon's case), the prospectus was vague in the description of the objects of the contemplated company, and if properly investigated by an applicant for shares might have caused some mistrust as to the feasibility of the scheme; but after application for shares he did not repudiate it. It was held by Vice-Chancellor Wood that the prospectus did not contain such a fraudulent representation as to entitle applicant to have his name removed from the list of contributories.

COMPOSITION DEEDS.—Although a debtor has been taken in execution before the signing of a valid composition deed, under section 192 of the Bankruptcy Act, 1861, yet, on the registration of the deed, he is entitled to his release from custody. The Court of Queen's Bench thus decided in the case of Marks *v.* Hall.

IMPROVEMENTS IN THE TREATMENT AND MANUFACTURE OF IRON AND STEEL.

Mr. JOHN CALVERT, C.E., has just specified his patent, which consists in "certain improvements in the treatment of iron, whereby it is manufactured or converted into iron possessing welding properties of a high order, or into steel of the best quality, in a simple, effectual, and economical manner." Before describing the processes which constitute his invention, he makes some observations which will tend to elucidate the principles upon which it is based.

Iron has but little affinity for or inclination to form alloys and chemical combinations with metals and many substances, and, therefore, when subjected to the influence of heat it will generally disengage itself from its chemical combination with other metals or substances, which will be wholly expelled, or be retained only in mechanical mixture with the iron. Iron crystallises when cooling, or when under the influence of percussion or vibration, or of electric or magnetic currents, and is always more or less cellular (polythallamic). Such crystallisation may be divided into four classes. The first kind (placoidean) is that which occurs in iron, which is comparatively pure, such as meteoric iron. The second kind of crystallisation (sphenoidean) may be compared to that which exists in granite, the crystals being perceptible to the eye. Both the last mentioned forms of crystallisation produce iron which does not possess much strength. The third variety of crystallisation (polkiloidean) may be compared to porphyry, as the crystals are embedded in the surrounding matters. This is the most impure of all descriptions of iron, owing to a large admixture of foreign substances and impurities, which are more or less imperfectly melted, and is but little adapted for the purposes of manufacture. The presence of titanium and other metals of a similar refractory nature often produces this quality of iron. Iron, which is the subject of the fourth class of crystallisation (serteoidean) may be termed homogeneous, as the facets of the crystals are not visible to the naked eye, the expansion of the cells throughout the iron having effaced or pressed out the very small crystals of which the iron consists. This description of iron is of the strongest character, and the best steels may be included under this head. In the process of smelting the iron as it runs out of the blast-furnace is completely honeycombed with hollow cells, which, owing to the lateral resistance being the greatest, become slightly elongated in accordance with the shape of the pig, but if the iron ran out without meeting with the resistance which is given by the sides of the mould, the cells would be perfectly spherical and in their true normal condition. The carbon contained in iron in this state is nearly all held in chemical combination, and in consequence the iron ought to cool as it leaves the blast-furnace, inasmuch as the carbon is so hot that it will go off before the impurities combined with the iron can be got rid of, for as carbon has a great affinity for oxygen at a white heat, it will, when in that condition, deprive silex, phosphorus, and sulphur of their oxygen, or will prevent their oxidation, thus lessening the cleansing power of the oxygen to deal with the mass under treatment. In the metallurgical treatment of iron, with a view to render it especially adapted for the purposes of welding or for the production of steel, it is essential that the several particles of which the mass is composed should be entirely under the control of the operator, in order that they may be respectively subjected to those influences which are instrumental in producing the desired result. Thus, in the "pneumatic" or "Bessemer" process, the partial contact of the iron with the atmospheric air which is introduced into the converting vessel, however it may assist in effecting the change of character which is sought to be obtained, yet it is also desirable that the iron should be retained in a finely divided state until all the chemical and electrical changes necessary for the production either of iron or steel of the required quality have taken place. By the pneumatic process the best descriptions of pig-iron only can be used, as the metal is decarbonised too rapidly to allow of its being freed from the sulphur and phosphorus and other impurities, whilst a part of my present invention is important, inasmuch as inferior kinds of metal may be retained at a low heat until they are tolerably well cleansed.

In order to prepare the iron for the necessary subsequent treatment, and to cleanse it from the various foreign substances with which it is combined, it should be brought to a red heat, so that the carbon shall be partially retained until the iron shall have been cleansed from the other impurities, for which purpose, and to prepare it for the necessary subsequent treatment, it should be in the first instance brought into thorough contact with oxygen, either in its pure state or as it exists in the atmosphere, whereby it obtains the benefit of the chemical and electric influences of the same. To effect this contact the iron is reduced to a state of powder or fine division whilst at a red heat, by means of any suitable mechanical appliances, such, for instance, as revolving circular saws, which I will, for the purpose of description and explanation, assume as being used. The circular saws are rigidly braced together and nearly touch one another, and are set to revolve at about 1-16th of an inch out of gear. Great care must be taken that the pig shall not cool, as it would in that case break the saws. The revolving saws may during the course of each revolution, according to the temperature required, touch or become partially immersed in water or cold sand. Whilst the saws are disintegrating the iron or exposing its particles to the oxygen of the atmosphere, purification of the iron is rapidly taking place, for as each particle of iron becomes liberated by the saws it will immediately absorb oxygen, and, if allowed to do so, will increase in temperature, and even appear to explode, more especially if oxygen in excess be added to the atmosphere through which the red hot particles of iron fall. It will be evident that the temperature to which the iron shall be exposed will be entirely under the control of the operator, and if the pig be very impure, or contains much sulphur, phosphorus, or silicon, it will be manifest that the temperature should not be increased above a red heat; or, on the other hand, with metal of greater purity, a very high degree of heat may be obtained through the medium of oxygen. In some cases it may be necessary to repeat the operation of disintegration, and to allow the red hot particles to fall into water, or to subject them to the influence of gases or chemical solutions.

The nature of the gases or solutions necessary to be so employed must, of course, vary, and depend upon the chemical constitution and nature of the iron under treatment, and the character of the elements which it is desired to impart to or abstract from the iron in order to arrive at the desired results, as will be well understood by persons conversant with chemical and metallurgical operations. As examples of the gases which may be so used, carbonic acid gas, carbonic oxide, oxygen, and hydrogen may be named, whilst cyanide of potassium, carbonate of lime, and nitrate of soda in solution will represent the liquid solutions which may be employed. In cases in which it may be found necessary to retain the particles of iron at a red heat for any considerable length of time for the purpose of getting rid of impurites, the red hot particles may be so arranged that they shall fall on to the hearth of a reverberatory or other suitable furnace, and being there kept the desired length of time at a red heat, the particles may be allowed to agglomerate together into balls, which they will readily do. In order to impart or develope the amount of magnetism to or in the iron requisite for the constitution of the crystalline or grained structure which is essential to produce the degree of strength desired, and also to assist in the further cleansing or purifying of the same, the finely divided iron should be subjected to such influences as will produce the requisite polarity in the several particles thereof, if the same have not originally possessed such polarity, or acquired the same during the operations to which the iron has been subjected. This is effected by placing the finely divided iron either in a heated or cold state in contact with iron which has been permanently or electrically magnetised, or by passing an electric current through the mass during treatment, or by agitating the iron by means of any suitable apparatus, so as to produce a considerable amount of friction by the particles rubbing against each other, or the finely divided iron may be caused to fall from a considerable height through the atmosphere, the result being that the several particles acquire the requisite polarity.

The iron having been, as hereinbefore mentioned, treated whilst in a state of minute division, and consequently entirely and thoroughly under the control of the operator, the mass is thereby fitted for introduction into the furnace, in which it is brought to a welding heat. The iron should then be subjected to the rolling apparatus or welding hammers before it is suffered to cool, for the normal cellular structure of the iron being spherical, the cells require to be slightly collapsed and to take a more elongated form, and which would never be perfectly uniform throughout the mass if the iron were allowed to cool before being subjected to the necessary pressure, as foreign matters, such as, for instance, free carbon in the form of graphite and titanium (when that metal is in combination with the iron under treatment), will from their partial non-affinity to the iron partly occupy the cells. At this stage of the process a strong malleable iron is obtained, in which the carbon which is still retained is chiefly in mechanical combination, the cells being nearly filled with the graphite and other substances, as before mentioned. The iron is now very much purified and suitable for drawing or welding, or for the process of conversion into steel, and will be found to possess the peculiar grain and crystalline structure characteristic of strength, such change being due to the magnetic and other properties which have been imparted to or developed in it by the before-mentioned treatment.

If, during the process of purification, too much carbon shall have escaped from the iron, then, if the conversion of the latter into steel be intended, carbon must be added thereto, either by the addition of powdered graphite springled over the mass during the process of "balling," or by any other known and suitable method, or boron, either in the form of borax, boracic acid, or in other chemical combination may be introduced at this or other stages of the manipulation, either independently of the carbon or otherwise. In order to form steel from the malleable iron, in which the carbon exists in mechanical union, it is necessary to cause a portion of the carbon to recombine chemically with the iron, which it will do simultaneously with the compression or collapsing of the elongated cells, and which may be effected by means of a succession of percussive blows, or by the sudden application of cold to the heated mass, or by the known methods of carburisation. The strongest description of steel, as at present manufactured, is a chemical combination of carbon and iron, with a small percentage of one or more foreign metals, such as manganese, titanium, or silicon in alloy with the iron, such alloy having mechanically combined therewith a sufficiency of foreign matter to partially occupy and fill the cells, and to protect them from total collapse. What is required for the production of steel of the best quality is combination therewith of a substance or substances harder than itself, such for example as carbon or boron, and the metals which will come next in succession according to their relative hardness, but it is also requisite that some hard substance should occupy the cells, or portions of the cells, in the minutest mechanical division; for the purpose of imparting rigidity to the mass, crystallised carbon (diamond) or crystallised boron I consider to be the best adapted for this purpose. Carbon in the state of graphite will be of little use except in articles of inferior quality, therefore to crystallise some portion of the carbon or boron chemically present in the steel is what I aim at. The previous treatment of the iron has been preparing it by a succession of stages, and now the aid of electricity is again called in to assist the operation. Having at an early stage of the process polarised the iron, as before mentioned, it is now more susceptible to the action of an electric current to which it may be subjected, such electric current being caused to pass through the mass whilst under treatment. The current must be adapted to the slow process of carburetting, or be employed simultaneously with percussion, or with the compression arising from the sudden application of a cooling agent. Great care must be taken that the heat engendered by the force of sudden collapse caused by change from heat to cold or hammer blows shall not neutralise the effect by its own agency. By the means hereinbefore described the strongest quality of steel is produced, its superiority being chiefly owing to the compressed cells of the steel being more or less filled with crystallised carbon (diamond), boron, or other hard substances, instead of carbon being retained in the cell in the form of graphite, as heretofore.

Having thus fully declared and ascertained the nature of my said invention, and the manner in which it is to be performed, I would observe, in conclusion, that what I consider novel and original, and, therefore, claim as being the invention secured to me by the said hereinbefore in part recited Letters Patent, are—First, the employment of crystallised carbon in the manufacture of steel, as hereinbefore described and set forth; secondly, the use and application of boron in the manufacture of steel, as hereinbefore described and set forth; and thirdly, the treatment and manufacture of iron and steel in the manner and by the processes substantially hereinbefore set forth and described, or any mere modifications thereof.

Mr. John Walker Ford, accountant, of Walbrock, has been appointed by the Master of the Rolls to be official liquidator to the Stowe Iron Ore Company (Limited).

Mining Correspondence.

BRITISH MINES.

ABRAHAM CONSOLS.—J. Vivian, March 28: The shaftmen sinking the engine-shaft continue to make fair progress in sinking. The lode in the 9, driving east, is not so good for tin as it has been; this level, driving west, is much the same as it has been, worth 5*l.* to 6*l.* per fm. for tin. The lode in the adit, driving east, is much the same as for some time past, not producing enough tin to value. I have two men clearing up some of the old men's pit, and find tin in almost the whole of it, but the very heavy falls of rain we have had recently prevents us from going deep enough to get it in paying quantities.

BEDFORD UNITED.—J. Phillips, March 28: The stopes throughout the mine continue to produce the same as when last reported. We are driving by the side of the lode in all the levels at the north shaft.

BEDOL-AUR.—R. H. Harvey, March 28: The shaft is now down 89 yards from surface; set to eight men, at 18*l.* 10s. per fathom; the ground is rather more favourable for sinking. The cross-cut in the 70 west is producing stones of lead, by which we expect shortly to cut the lode. Jones's pitch, set at 7*l.* per ton, is producing 10 cwts. of lead per fathom. We are erecting the whim with all possible dispatch.

BLACK CRAIG.—J. Smitham, March 28: The lode in the 54, driving east on Harriet's lode, is producing about 7 cwts. of lead per fathom, and about the same quantity of blende; it is a pretty-looking thing. The lode in the 54, driving east of the cross-cut, on the new discovery, is producing from 5 to 6 cwts. of lead per fathom. We shall commence next week driving a cross-cut north from the 54 end west. The stopes in the back of the 6, below the 43, are producing about 30 cwts. of lead per fathom.

BOTTLE HILL.—Joseph Eddy, March 28: Friday last being our setting-day, the following bargains were set:—Main Lode: To four men a stope in back of the 24, east of Bucking-house shaft, where the lode is about 5 ft. wide, worth about 4*l.* per fathom; cost for stoping, 30s. per fathom. A pitch to four men, in back of the 12, west of new shaft; tribute, 13s. 4d. in 1*l.* The lode in this piece of ground has a very kindly appearance, and at present turning out good work for tin.—South Copper Lode: The 24 to drive west of shaft by four men, at 4*l.* per fathom; the lode is still small. A pitch in bottom of the 12, east of cross-cut, to two men, at 13s. 4d. in 1*l.* tribute; the lode here about 2 ft. wide, and turning out good stamps' work. We have put four men to sink on a lode north of Roberts's lode; we have now sunk about 3 fms. from surface, and find the lode 3 ft. wide, all saving work; this lode discovered is in whole ground from surface. We shall commence burning for our next sampling the early part of the coming week.

BRONFLOYD UNITED.—Thomas Kemp, March 27: During the past week the water has so much increased at the new shaft that we found it impossible to continue the sinking by manual force, and I have, therefore, suspended it for the present, until the new wheel is ready to work. The shaftmen in the meantime will be employed in cutting lodge in the 52, and in fixing pumps, &c., so that we shall be able to carry the wheel down with dispatch as soon as it is ready. The lode under the 52, and in the stopes above this level, are without any change since last report. We have good open weather, and we make the best of it. We sampled 35 tons of lead ore on Monday last.

BRYN GWYN.—H. Nottingham, March 26: The level driving south-west from middle of incline, east of shaft, has become much easier for driving again, but without any other change. There has been nothing done in the lower level, south of incline, the men being engaged tramming and wheeling stuff in other parts of the mine. There is no change in any of the trials about the middle of the incline. I regret to say the tributers' pitch in the bottom of the north level, near Field's rise, has fallen off in value since my last, the ore being cut off by a narrow joint crossing the end, though it may again make lead after a little further driving. The trials we are making about the north part of the mine by the stem-work men are yet unproductive.

CAPE CORNWALL.—R. Pryor, W. White, March 27: The lode in the 90 fm. level is still worth 10*l.* per fathom, with a good appearance. The lode in the stope in the back of this level is worth 9*l.* per fathom. The lode in the 70 fm. level, west of shaft, continues to produce good stones of rich yellow copper ore, and the ground getting redder, as if nearing the caunter lode.

CARADON CONSOLS.—S. Bennetts, March 26: The 90 west is without much alteration. The 80 west is slightly improved, and so also is the winze below the 80. The ground in the rise above the 54 is good, and the elvan on the south side perpendicular. The water is very abundant in the new shaft, being the result of the late heavy rains.

CLARA UNITED.—J. Davis, March 27: The mine is drained to about 5 fms. below the 40, and the men have resumed work in that level. I expect all the water will be out by next Friday. We are in full work at surface, and we sampled 20 tons of lead ore on Monday last.

CROWAN AND WENDRON.—R. Reynolds, March 27: The late heavy rains have been very much against our surface operations, but I am glad to say the whole is now on the eve of completion, and in two or three days we shall put the wheel to work.

CWM ERFIN.—March 26: The stope in back of the 20 has slightly improved since the last report. The lode is 5 ft. wide, worth 1 ton of lead ore per fathom. Fair progress has been made in the rise over the back of the 10; the lode is 4½ ft. wide, containing killas, blende, and cubes of lead ore. Two stopes are in course of working over the back of the 10; the lode varies from 3 to 6 feet wide, and will yield on average about 1 ton of lead ore per fm. A slight improvement has taken place in the deep adit level, east of the boundary; the lode is 2 feet wide, composed of a slight clay-slate, decomposed quartz, and cubes of lead ore—looking very promising. The lode in the stope over the back of this level is 6 feet wide, worth 1½ ton of lead ore per fm. The lode in the stope over the back of ditto is worth 2 tons of lead ore per fathom. Taylor's drift, going east of the boundary, has continued to lay open a nice piece of ore ground since the last report; the lode in the present end is 5 ft. wide, worth 2 tons of lead ore per fm. The lode in the same level, west of the footway winze, is 2 ft. wide, worth ½ ton of lead ore per fm. We have fourteen men employed in the various stopes over the back of the same level, in which the lode will yield on an average 12 cwts. of lead ore per fathom. The lode in the adit level, west from the cross-cut, in the western part of the sett, is 6 in. wide, composed of killas, decomposed quartz, and a small branch of ore, about ½ in. wide. There is no alteration in any other part of the mine worthy of remark. We have sampled this day 65 tons of lead ore.

DEVON AND CORNWALL UNITED.—Thos. Neill, March 26: George and Charlotte: We have no change to notice in the 24 west.—William and Mary: The lode in the 22, west of the engine-shaft, is looking very promising, producing good stones of ore. We have a rise in the back of this level; the lode is worth from 4 to 5 tons of good ore per fm. The lode in the 34 west is producing some saving work. We have not yet cut the ore ground in the 46, east of the whim-shaft. We have two stopes in the bottom of the 34 worth 5 tons each per fathom. The lode in the 34 east is a little improved. We have one stope in the back of this level, worth 4 tons per fm.

DEVON WHEAL LOPES.—J. Richards, March 27: Since the commencement of operations a water-wheel, 40 ft. in diameter and 8 ft. wide, has been erected, with a line of 3-in. flat-rods, balance, angle, and shaft-bobs, with all the other necessary appliances, which works remarkably well, and by the aid of which we have forked the water to about 10 fms. below the 50 fm. level. I may state that in our downward course, having a very large quantity of water to contend with, we had to be exceedingly careful and certain as to the capability of the pitwork, &c., as we proceeded. The first 30 fms. of water were taken out of the engine-shaft by two drawing-lifts, the working barrels of which were 17 in. in diameter, and lifting about 400 gallons of water per minute; as soon as the 30 fm. level was reached, a 16½-in. plunger-lift was substituted, which works as well as could be desired. After the 30 fm. level had been reached, we proceeded to fork the water below that point, and after having secured as much of the water as we could at the 30 fm. level, I endeavoured to get below with a 12¼-in. working-barrel, and succeeded in getting down several fathoms. We still had difficulties to contend with, and finding this lift inadequate, I placed an 11-in. one beside it, they are both working admirably; and on reaching the 51 fm. level these two drawing-lifts were substituted by a 14-in. plunger-lift, the drawing lifts being used for going below the 50 fm. level, for 10 fms. below which the water is now taken out, and I hope to see the 62 fm. level next week. We have not had time to clear out any of the levels except the 50, east of the engine-shaft, which is driven 145 fms., and communicated with Tresidder's shaft; this level is down about 22 fms. beyond this, where a cross-cut, driven north a few fathoms, seems to have intersected a very large portion of the lode, apparently gone off in that direction a few fathoms back. Throughout the 50 fm. level, so far as we have yet examined it, the lode is from 2 to 4 ft. wide, composed of quartz, capel, and mundic principally; the lode has been tried only by one winze, down from the 30 fathom level, and on both sides of the said winze the lode produces blende and copper ores, specimens of which I sent for the shareholders' inspection some time ago. The 62 fm. level we have not yet had an opportunity of seeing, but hope to next week. I am informed by the men that in this level east, for many fathoms in length, a good lode for blende and copper ores exists, and I have good reasons for believing so, seeing such a fine-looking lode in the 50 fm. level. I may here mention that no level whatever exists west of the engine-shaft at the 50 fm. level. I mention this to show the inadequate trial the mine has received; for, in addition to the levels having been driven and shafts sunk, very little besides has been done. At every point, however, where the lode has been tried by winze, rise, or stope, it seems to have been productive, and a reference to the section will show that from the extreme point east the lode has been stoped in the 50 fm. level, to the most extreme point west in the 14 fm. level, there has been ore raised, and at several intermediate points. It is very evident therefore, I think, that blende and copper ores exist, and having so many levels driven is so much available work done, and as soon as the present levels can be cleared, and railroads put in, I am of opinion the backs and bottoms of the levels should be tried by winzes, rises, and stopes; and if this should prove the lode valuable, as I believe it will, there are several thousand fathoms of ground laid open, which must have cost the former proprietors of the mines many thousands of pounds outlay, of which we shall reap the advantage; and I believe if the mine has an effectual trial it will not only prove largely productive, but very profitable also to the proprietary.

EAST CARADON.—J. Truscott, March 20: Caunter Lode: The 100 east is worth 5*l.* per fm. The 100 west is worth 5*l.* per fm. The 90 east is worth 8*l.* per fm.—South Lode: The 100 east is poor. The 70 west is worth 10*l.* per fm. The 70 east, on south part, is producing saving work.

—J. Truscott, March 27: The 100 east is worth 5*l.* per fm. The 100 west is worth 5*l.* per fm. The 90 east is worth 8*l.* per fm.—South Lode: The 100 east is producing saving work. The 70 west is worth 12*l.* per fm. The 70 east, on south part, is producing saving work.

EAST CARN BREA.—I. Richards, March 27: The sinking of Thomas's engine-shaft is for the time suspended, and the men are engaged cutting ground above the 60 fm. level, for the purpose of bringing down and fixing permanent pitwork below that level.—Thomas's Engine-Shaft: No. 3 Lode: In the 80 east the lode is 15 in. wide, consisting of capel, mundic, quartz, and a little copper ore. The lode in the 80 west is 2 ft. wide, and worth 2 tons of copper ore per fm. The lode in Vincent's winze, in the bottom of the 70 east, is 1 ft. wide, and consists of capel, mundic, quartz, and a little copper ore. The lode in the 70 east is 2 ft. wide, and worth 1 ton of copper ore per fm. The lode in the 60 east is 1 ft. wide, composed of capel, mundic, and good stones of copper ore. The lode in Morcombe's winze, in the bottom of the 60 east, is 15 in. wide, and worth 2 tons of copper ore per fm. In Lobey's cross-cut south, in the 50 fm. level, the main part of the lode has been met with and cut through; it is 1½ ft. wide, composed of capel, fluor, quartz, mundic, and good stones of copper ore.—Buckley's Shaft: No. 6 Lode: In the 60 east the lode is disordered by a cross-course. The lode in the 60 west is 1 ft. wide, worth 1 ton of copper ore per fm. A winze (Rowatt's) is being sunk in the bottom of the 60 west, the lode in which is 15 in. wide, and worth 1 ton of copper ore per fm. The lode in the 50 east is 1½ ft. wide, consisting of quartz, capel, fluor, mundic, and copper ore—saving work.

EAST GUNNISLAKE AND SOUTH BEDFORD CONSOLS.—J. Phillips, W. G. Gard, March 28: There is no change of importance since our last report. The water is steadily draining below the 36, west of cross-course, and is now down about 3 fathoms. The rise in the back of the shallow adit is not so productive.

EAST ROSEWARNE.—C. Glasson, March 28: We have resumed the sinking of King's shaft, the lode is 1 foot wide, yielding rich stones of copper ore, and promising to improve as we get deeper. In the 95, west of King's, the lode is 6 in. wide, and for 2 feet above the bottom of the level it is worth 6*l.* per fathom. In the 95, east of King's shaft, the lode is 10 in. wide, producing good stones of copper ore, but not enough to value; I think this end will very soon improve in value. In the 85, west of King's shaft, the lode is the same as last reported, worth 4*l.* per fathom. The 85, east of Hallett's, and the 43, east of King's, on the engine lode, is suspended for the present, and the men put to stope the back of the 95, west of King's shaft, in a lode worth 8*l.* per fathom. No change to notice in any other part of the mine.

EAST ST. JUST UNITED.—Richard Pryor, R. P. Goldsworthy, R. Wearne, March 27: The ground and lode at Phillip's engine-shaft, sinking below the 20, is without change. In the 20, south of Phillips's shaft, the lode is without change; the ground is a little more favourable.—Western Mine: Saveall's Lode: The lode at the engine-shaft, sinking below the 76, is not quite so large as it was last week, worth 11*l.* per fm. The lode in the 76, west of shaft, is worth 7*l.* per fathom, and promising for further improvement. The stope in back of this level is worth 5*l.* per fm.—Buck Lode: The 62, driving east, is worth 3*l.* 10s. per fm.—Owl Lode: In the 20, south of Saveall's, the lode is split into branches, and at this time not of much value; these branches will shortly unite, when an improvement may be expected. The lode in the 20, north from West Buck shaft, is worth 11*l.* per fm. The lode in the 10, north from same shaft, is worth 7*l.* per fathom. The lode in the winze sinking below the adit is worth 8*l.* per fathom. The lode in the adit north is worth 7*l.* per fm., and likely further to improve. No change to notice in any other part of the mine.

EAST WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, March 27: The men are making good progress with the sinking of the shaft below the 95. We find in the dropper, and in the main part of the lode, good stones of yellow ore. The lode in the rise above the 95 west will yield very nearly 3 tons of rich ore to the fathom. The lode in the back, further east, will yield 1½ ton of good ore to the fathom. The lode in the winze sinking below the 85 west will produce from 3 to 3½ tons of ore to the fathom. The lode in the 75 east is from 6 to 8 in. wide, of mundic and yellow ore, quartz, &c., which continues to let out a great deal of water. We have not met with any lode in the 75 cross-cut north.

EAST WHEAL LOVELL.—R. Quentrall, March 27: The mine continues to open out extremely well, and at the meeting, on Wednesdty next, I will fully report therein.

EAST WHEAL RUSSELL.—James Richards, March 22: Homersham's Shaft: In the 150 cross-cut north, the continuing favourable, fair progress is being made. In Eddy's cross-cut north, in the 146 east, a lode or branch has been intersected, which is 20 in. wide, composed of capel, quartz, mundic, and a little ore. Owing to the very soft nature of the ground in the 40 east, and the great pressure of water following the driving as we proceed, we find it absolutely necessary to continue the driving some distance further by the side of the lode. We hoped to have been able to see the lode to-day, but after an ineffectual trial, and a close examination of the driving, we were obliged to adopt the above course. In removing a lath, however, some good stones of ore came away with the stuff, which plainly indicates a good lode to the north. In the trial cross-cut north, in the 130 east, nothing has been met with.

EAST WHEAL RUSSELL.—J. Goldsworthy, March 28: Homersham's Shaft: The ground in the 150 fm. level cross-cut north is favourable—fair progress being made. The shaftmen will now be engaged in cutting down the ground left standing in the bottom of the Punch pit, below the 140 fm. level, putting in skip-road, casing and dividing shaft from the 140 to the 150 fm. level. In the 140 fm. level cross-cut (Ede's), driving north, the ground is favourable, the stratum is highly mineralised. In the 140 fm. level east, the driving being continued by the side of the lode, the ground is heavy and wet; there is an increase of water in the breast of the end; we hope soon to overcome the difficulty with which we have had to contend, and open into the lode. In the 130 fathom level cross-cut, driving north-east of the slide, the ground is elvan of good description.—P.S. The lode in the 140 fm. level has not been seen east of the slide since the crush took place.

FRANK MILLS.—J. P. Nicholls, J. Cornish, F. Cornish, March 27: The east lode, in the 145 north, is 6 ft. wide, consisting of quartz, white iron, and capels, interspersed with branches of mundic, blende, and lead ore, and yielding of the latter a little saving work. We have a white elvan at the west side, and accompanying the lode, of a very congenial description, and we have no doubt the lode will soon improve in value. In the cross-cut driving west, at the 130 north, on the east lode, we have not met with any more lode or branches, but the ground is rather more favourable for progress. The west lode, in the 130 north, is at present small and poor, being in disordered ground. The two stopes in the back of this level are producing 1 ton and ¾ ton of lead per fm. respectively. In the cross-cut driving east from the 115 north, on the west lode, we have very stiff, wet, and troublesome ground, and we continue to pass through more parts of the lode, consisting of white iron, with a little lead ore, but not to value as yet. The two stopes in the back of this level are each yielding ½ ton of lead ore per fm. The 100 north, on the west lode, has been resumed; it is yielding saving work, and looking well for improvement. The three stopes in the back of this level are each yielding ½ ton of lead ore per fathom. The stope in the back of the 45, in the north part of the mine, is yielding ¾ ton of lead ore per fathom. The tribute department is looking just the same as for some time past, with the exception of one of our old pitches in the back of the 46, which has improved, and the men earning high wages. All other parts of the mine are without any change to notice.

FURSDON.—Capt. Collins, March 28: In the stope in the bottom of the 21 west the north part of the lode is not looking so well as it did last week; the lode is large, and carrying ore. I have no doubt there are many tons of ore between the 21 and the 31. We have put the stopemen to drive west on the lode at the 31. The rise in the back of the 21 east is without change. The end at the 11 east is still letting out much water, and the ground is very kindly for ore. The stope in the back of the 11 east has been poor since last week, but is improved to-day. I believe it will be better to put up a rise in the highest place in the stopes, as high as the bottom of the adit, and to drive the adit end to cut the lode, which I believe is south of the present level, and, probably, this will drain all the water which we have at the 11, and likely we may cut the top of the same shoot of ore which we have been stoping on for several months past. We calculate we have near 20 tons of ore raised, but not enough dressed to sample for this month.

GAWTON COPPER.—G. Rowe. G. Rowe, Jun., March 23: The new engine-shaft, sinking below the 60 fm. level, is progressing as fast as the nature of the ground will admit, which is very satisfactory. The lode in the 60, east of cross-cut, is 5 ft. wide, of a most encouraging appearance, with a large vugh, containing ore and mundic, intermixed with quartz and good quality yellow copper ore, to the amount of 4 tons per fathom. The lode in the rise in back of the 60 west is 4 ft. wide, worth 5 tons of ore per fathom. The lode in the winze sinking below the 50, west from cross-cut, is worth 5 tons of ore per fathom. The part of the lode being carried in the 50, west from Moore's winze, is worth 4 tons of ore per fathom. The lode in the 40, west from Molland's winze, is worth 2 tons of ore per fathom. The ground in the 50 east is not quite so good for progress as it hitherto has been. We are busily engaged in preparing for our next sampling, which we calculate will be about 120 tons of ore, broken entirely in the different points of driving and sinking, exclusive of any of the lode being stoped away.

GLASGOW CARADON CONSOLS.—William Taylor, March 26: I cannot yet report much change in the lode in the 78 west, but the ground about the lode is of a more favourable character, some beautiful white elvan, mixed with the granite, just the sort to produce quantities of ore. I do not think we shall have to drive much further before we get into the ore here. In the 65 west the lode continues to have a very fine appearance, and large, composed of white prian, mundic, gossan, and ore, worth from 6*l.* to 7*l.* per fathom. I am daily expecting to see this end strike into a course of ore ground, easy and favourable for driving. In the 65 cross-cut south, towards East Caradon south lodes, we have a very favourable change in the ground, with an increase of water, by which I think we are near the lode. This is now an important point, which we are pushing by six men as fast as possible. No other change to notice this week.

GREAT LAXEY.—J. Barkell, March 26: Since your last meeting, held on the 13th inst., nothing has been done at the 220 fm. level; the severe frost we have had having stopped the wheel, the water has been in, and the shaftmen have been engaged in casing and dividing the engine-shaft from the 210 to the 220 fathom levels, which is now completed. The lode in the 210, going north, is worth for blende 20*l.* per fathom. There is no change in the 200 fm. level end going north; lode hard, and slow for progress, worth 30*l.* per fathom. There is a great improvement in the 190, going north; the lode was last reported worth 80*l.* per fathom; it is now worth 130*l.* per fathom (the 200 fm. level end will soon get up to the ore ground), and there is still a greater improvement in the 165 fm. level end going north; for the meeting this end was reported to be worth 40*l.* per fathom; it is now worth 120*l.* per fathom. There is no change worthy of notice in the 155 fm. level north; lode still worth 60*l.* per fathom.—South Ground: There is no change to notice in this part of the mine since our last report. We expect to hole from the 165 to the 190 fm. levels in about two months from this time, when we shall have large quantities of copper ore to work away at a great advantage.—Dumbell's: We continue to make good progress in sinking Dumbell's new shaft below the 110 fm. level, the lode in which is 7 ft. wide, and worth 120*l.* per fathom; price for sinking 28*l.* per fathom. There has been a slight falling off in the value of the lode in the 110, going north, since last reported, but we believe the falling off is only temporary; lode now worth 60*l.* per fathom. The 85, driving north, is worth 40*l.* per fathom; the same level driving south has opened out some rich ground for us, varying in value from 120*l.* to 180*l.* per fathom; but during the past week we have intersected a slide, which has shifted the lode, we believe, to the west of the present end; consequently, we shall drive in a south-westerly direction to intersect it again. The 70 fm. level south, which is a few fathoms in advance of the 85 south (the last-named level), has greatly improved, and is now one of the best ends we have in the mine, worth 140*l.* per fathom. The stopes and pitches throughout the mine are keeping up to their usual value, and are rather on the improving side. Seeing this, and the great improvement in the 165 and 160 going north, I do not hesitate to say that I have never seen a mine looking so well as it is to-day. At Glenroy the wheel has been frozen up for several days, consequently scarcely anything has been done in the shape of sinking the shaft for the past fortnight.

GREAT NORTH DOWNS.—W. Rich, C. Bawden, March 27: The lode in sinking Sleggan's shaft is not quite so valuable as heretofore, owing to its being within the influence of the slide, which is dipping slightly east. We had the same results in sinking the No. 2 winze, 30 fms. west of this shaft, where the lode was comparatively poor for 6 or 9 ft. under the slide, but it has recently improved, now worth fully 20*l.* per fathom, and the ground very easy for working. Three stopes in the 70, west of Sleggan's, over the slide, are worth 15*l.*, 10*l.*, and 15*l.* respectively. The lode in the 70 end west is large, and yielding stones of ore. The 86, west of King's, is worth 6*l.* per fm. We have a set of men employed making plat in the 86, with the view to sink this shaft and see the lode a few fathoms under the slide, where we anticipate an improvement. We have cut through the lode at Butler's shaft, which is over 20 ft. wide, of a very promising appearance, and carrying saving work for copper on the south side of it; by driving some 20 fms. east we shall intersect a very fine looking cross-course; we intend to urge on towards this cross-course, and open up a communication with the 70 end, from Sleggan's, which will thoroughly ventilate the mine, and we think open a valuable run of ore ground.

— *Telegram.*—March 28: The lode in Sleggan's shaft now worth 35*l.* per fm. for length of shaft.

GREAT NORTH LAXEY.—R. Rowe, March 26: The engine-shaft is now 4¼ fathoms below the 84; the lode is about 2 feet wide, hard, and composed mainly of quartz, with at present only a small quantity of lead. The lode in the 84 north has suddenly come to a nip, and in consequence is not at this moment so good for lead, but we expect it will open out and improve very shortly. Other places, including the stopes, continue much as reported at the recent general meeting.

GREAT SOUTH CHIVERTON.—J. Nancarrow, J. George, March 25: The lode at Gifford's engine-shaft looks exceedingly well, has much less underlie than at any time since it came into the shaft, and has all the appearance of soon becoming productive. The water in the 30 cross-cut north is increasing, which is evidently draining the 20 fathom level. There is no important alteration in the 20 fm. level east.

GREAT SOUTH TOLGUS.—John Daw, March 27: During the past week very little progress has been made in forking the water, owing to a breakage in the angle-bob, and one of the boilers sprung a leak; also in the past two or three weeks we have had excessive floods of rain, which have very much increased the water, but this, I hope, will fall back again soon. We shall sample 28 tons of copper ore to-day.

GREAT WHEAL BADDERN.—Richard Pryor, Henry Tregoning, March 22: In handing you our report to the committee, we beg to state that the 75 cross-cut, south of Hill Brothers engine-shaft, is now in about from 34½ to 35 fathoms, and driving by six men, at 16*l.* per fathom; this end has been in the Baddern elvan course all the distance, which has proved at this point to be upwards of 10 fathoms wider than at any other part cut through in the western mine. The water has been, and is still, increasing daily from the present end. This point is carried on with all possible speed, and from present appearance a change is anticipated to take place very soon; the end is thickly impregnated in the cross-heads, or veins, with mundic. We have for some few days past intersected spots of killas occasionally, which indicates strongly that we are getting through the elvan and the tin lode, which has been decidedly found under the elvan in every part throughout the western mine, and will, no doubt, be also intersected here in the same direction, and prove good, opening up a permanent and lasting property. The 75, west of the cross-cut, on the Baddern lead lode, is now in about 17 fathoms towards the old mine, and about 3 fathoms in the western hill; driving by six men, at 5*l.* per fathom, in a kindly lode, 2 feet wide, composed of sulphur, mundic, prian, and spots of silver-lead. The ground has undergone a favourable change since, the elvan being, from a hard to a decomposed nature, of a very congenial character for silver-lead, and we believe that the end of this month's working will tell us a great tale on two important points of operation. The tin lode may be cut into almost directly, as the water is constantly increasing. The engine, pitwork, &c., are going on satisfactorily but increased in speed by means of the continual increase of water.

GWYDYR PARK CONSOLS.—W. Smyth, March 26: The lode in Gwyn Llifon north end is about 20 in. wide, composed of spar, mundic, blende, and spots of lead ore, and letting out water freely. The lode in the west end is small, but much wetter than it has been, which makes me think we are near some change.

HALLENBEAGLE.—William Bawden, March 23: At Pinniger's engine-shaft the lode in the western end of shaft is 15 in. wide, well defined, and producing rich stones of copper ore, having a very good appearance. In the 56, east of Stone's shaft, the appearance of the lode is of a more congenial character, and producing copper ore. The lode in the 47, east of Stone's, is small, with spots of copper ore. In the cross-cut south the ground is favourable for driving. The water on Reed's lode is going down slowly.

HARWOOD.—J. Race, March 22: There is no alteration worthy of notice anywhere in the mine since my report of last week. Dressing operations are still suspended, owing to the stormy weather. This is the worst day we have had all the winter.

HINGSTON DOWN CONSOLS.—Thos. Richards, March 27: The 140, east of Bailey's engine-shaft, is worth 25*l.* per fm. All other points of operation without any material change.

LOVELL CONSOLS.—Wm. Chappell, March 28: In the 12 end west there is every appearance of an early improvement, as we are now getting out of the influence of the great cross-course, to the west of which, in the back and bottoms of the adit level, it is all taken away for tin; the lode is 3 ft. wide, and letting out a great quantity of water, which we consider a good omen for a course of tin a little ahead. We are making good progress in driving the cross-cut north to cut Trevenen north lode. I will forward you an estimate for the erection of water-stamps in the course of next week. All our machinery and pitwork in good working order, consuming 12 tons of coal per month, and keeping the water with ease. The engine is calculated to put the mine 50 fms. deep. As soon as the stamps are erected we shall make regular returns of tin.

MARKE VALLEY.—J. Truscott, March 26: The ground in Salisbury's shaft sinking below the 124, is without alteration.—Marke's Lode: The 112 east is producing 2 tons of ore. The 112 west is producing 3 tons of ore. In the 100 we are cross-cutting from the eastern end, on Marke's, towards Rosedown, where the ground is favourable.—Rosedown Lode: The 90 west is worth 1½ ton per fathom. The 80 west is worth 3 tons per fm. The 70 west is worth 3 tons per fathom. The 60 west is worth 5 tons per fm. The 50 west is worth 4 tons per fm.

MINERA UNION.—W. T. Harris, March 28: Douglas's Shaft: The lode in the 40 yard level north is 2 feet wide, of a very promising appearance. The lode in the south end is 3 feet wide, easy for progress, and yielding a little lead.—Brabner's Shaft: The ground in the 80 yard level cross-cut, towards the red rock, is favourable for progress. The ground in the 60 yard level cross-cut consists of chert, and containing a little lead.—Williams's Shaft: The lode in the 40 yard level north is 3 feet wide, worth 15 cwts. of lead per fathom, and looks very promising. All other points are progressing satisfactorily.

NETHER HEARTH.—William Vipond, March 23: The ore in the stope we continues about as last reported. The "flat" of ore near the bottom has been going by the side of the vein 2 or 3 fathoms before we discovered it. The men have been taking this off this week. I now think there is a good deal of ore in the lower part of the limestone.

NEW CLIFFORD.—J. Michell, March 26: The shaftmen are making very fair progress in sinking, and I believe by the end of next month we shall be down the 50, when I intend cross-cutting to intersect Gooley's and Holland's lode. The elvan that has been broken in the shaft lately contains in the head or divisions of the rock some very rich grey copper ore. When we consider the congenial character of the strata, and the occurrence of so much mineral in it which decidedly indicate deposits of ore in the locality, we can but allow this success is certain. The engine and pitwork are in good condition, and working very well.

NEW TRELAWNY.—E. H. Dingle, March 26: The lode in the 20 east is not quite so large as when last reported on, but so far as taken down has opened on tribute ground, and I have every reason to believe that the lode in this end will in a few feet driving, resume its former size and value. The lode in the 30 west has further improved since last reported on, being from 2½ to 3 feet wide, and will now yield 7 tons of mundic, intermixed with copper ore, to the fathom; is worth 14*l.* per fathom, and in the bottom of the level, for 3 feet high, is producing large rocks of black, spotted with rich yellow, copper ore, samples of which I have sent to the office. I am still of opinion that only a little more depth is required to make this a dividend-paying mine. We have driven end and west of shaft about 15 fathoms, and thus far have opened out ground that will be taken away at a fair profit. The back of each level is set on tribute. In the back of the 30 east I have set a pitch to four men, from this time to June, at 4s. 6d. per ton for mundic, the takers to dress the mundic at their own expense, and pay all cost. I have also set a pitch in the back of the 30 west, to four men, on the same conditions as the other pitch, at 4s. 3d. per ton, and all below well, shall now sell from 100 to 150 tons of mundic, &c., per month, the process of which will, I hope, meet a great part of the labour cost. I shall also now be able to select some copper ore for the market. The engine and pitwork continue in good order.

NEW WHEAL LOVELL.—Jas. Priske, March 28: The lode in the engine-shaft, sinking below the 53 fm. level, is 3 feet wide, worth 15*l.* per fathom for length of shaft (12 feet), and from the present appearance of the bottom of the shaft we may expect a greater improvement daily. The lode in the 53 fm. level east is 18 inches wide, worth 7*l.* per fathom. The lode in the 42 fm. level west is 2 feet wide, producing tin, and looking very kindly for a further improvement shortly. The lode in the 42 fm. level east is 6 feet wide, producing saving work. Altogether we are much improved.

NEW WHEAL TOWAN.—R. Pryor, March 27: The lode in the adit level driving west, has undergone a very favourable change, and continues its size and will produce more ore than when last reported on.

NORTH DOWNS.—F. Pryor, J. Grenfell, March 27: Bennetts's Shaft: The 70, east of this shaft, on the main lode, and the 40 fm. level cross-cut south, cut the south lode, are progressing satisfactorily, but there is no change to notice in either since last week. The 60, west of King's shaft, on the main lode, is letting out an increase of water; the lode is very regular, and producing stones of ore. The 50 west, on this lode, is looking very promising, and worth ½ ton of ore per fm.; this end is quite dry, and from the quantity of water issuing from the level below we have reason to believe there is a good lode in advance of this (the 50), which we are pushing on as fast as possible. The stope in the back of this level, on the south part of the lode, is worth 7*l.* per fm. In the east of King's shaft, on New Brigan lode, we have met with a little cross-course, which has disordered the lode for the present; we believe this to be the same cross-course we met with in driving on the south lode, which made a good run of ore ground east of the said cross-course, and we look for similar results on this lode when we get off the cross-course. No other change to notice.

OKEHAMPTON.—J. Richards, March 26: There are evident signs of the lode at the shaft; the water is very considerably increased, and the stones of gossan, &c., show we are close upon the lode. I hope we shall be able to sink through it with our present lift, when we shall fix plunger, so as to take up all the water we can at this point, and then sink on to the 50, as at first intended.

OKEL TOR.—J. Rodda, March 28: The ground in the 80 cross-cut south is moderately easy for driving, and is letting out water freely, which indicates our being near the south lode. Bates's stope in the back of this level, on the north lode, will produce 5 tons of ore per fathom; Reynolds's will produce 2½ tons; and Tregoning's will produce 2½ tons of ore per fathom. The south lode in the 65 fm. level east is worth 30*l.* per fathom. Oliver's stope in the back of this level, on the north lode, will yield 2½ tons per fathom. Wilton's stope will also yield 2½ tons per fathom. Williams's stope will yield 4 tons, and Geakes's will yield 3 tons of ore per fathom. Hele's rise in the back of the 65 east will yield 3 tons of ore per fathom, and Williams's stope in the back of this level will yield from 5 to 6 tons of ore per fathom. All the machinery is in good working order, and the general operations of the mine are going on well.

OLD GUNNISLAKE.—H. Rickard, March 28: There is nothing new in the mine to call forth any particular remark. The lode both east and west of Pinniker's shaft, at the 48 fm. level, is of the same kindly appearance, and the men are making rapid progress in driving.

PEDN-AN-DREA UNITED.—W. Tregay, C. Thomas, March 23: Sump: In the 140 cross-cut the ground is hard for driving, and the progress has been slow, in consequence of so much water to contend against the last few months. We expect, as the season advances, to make greater progress, both in the cross-cut and in extending on the lode after it has been intersected; this lode is worth 12*l.* to 16*l.* per fm. in the sink in the bottom of the 130, and in some parts spends for driving. The lode in the 130 west end is worth 13*l.* per fm. The pitches behind this end, in both the back and bottom of the 130, are looking very well, equal to their former value—20*l.* and 25*l.* per fm. respectively. The lode in the 120 north rise is worth 10*l.* per fm.; this is on Skimmer's south lode, and the

ground here being now open for the tributers the tutwork men are removed to the 130 east, on same lode, to prove the ground in that direction. The lode in the 120 west produces a little tin, not to value; we expect to find that the principal part of the large lode in the bottom of the 110 is south of this end; the ventilation not being sufficient to open this with advantage, the water in the bottom of Cobbler's shaft, over this end, preventing the sinking with much advantage, and the ground in the back of the 120 being cheap and easy for rising, we have set the men to rise through to Cobbler's shaft. The lode in the 100, east of Bragg's cross-course, is worth 10*l.* per fm.—Cobbler's: The lode (Martin's and Skimmer's) in the bottom of this shaft is worth 16*l.* per fm. The lode in the 110 west end is 6 ft. wide, worth 10*l.* per fm. In the 110 east end, not yet through the cross course. In the 96 cross-cut north nothing of importance intersected since last report. The 90 west, on north lode, is worth 7*l.* per fm. The bismuth and cobalt lode has been but slightly productive throughout the week. The tribute pitches generally maintain their improved productiveness reported within the last few weeks. We sold on Wednesday, at Bissoe, 8 tons 12 cwts. 2 qrs. 16 lbs. of black tin, for 469*l.* 8s. 1d.

PENHALE WHEAL VOR.—W. Chappell, W. H. Martin, March 28: All operations in this mine are being pushed on with all possible speed. The new lode in the 38 end, west of Battye's shaft, is very much improved. We have also cut the same lode in the cross-cut south, in the 26, which is 1 ft. wide, and producing saving work for the stamps. At our pay and setting to-morrow (Friday) we intend setting a cross-cut to drive south, in the adit level, to cut the same lode, which is proved to be in whole ground from surface to the bottom of the mine, and producing good work for tin in the 54, 38, and 26 fm. levels, and we have not the least doubt but that it will prove equally productive in the adit level, which is about 15 fathoms south of Parkwarrah lode. This new discovery, with that of cutting Penhale lode in the 74 cross-cut, will lay open a large and lasting mine, independent of sinking Sandford's shaft, on the Parkwarrah lode, which at present is producing some rich stones of tin. No alteration in any other part to report on. We shall sell 4 tons of tin in the course of next week. All the machinery and pitwork are in good working order.

PENHALLS.—S. Bennetts, Wm. Higgins, March 23: In the 60 east the lode is improving, and of a very promising character, producing some excellent tinstuff, worth about 6*l.* per fathom. The lode in the rise above this level has also improved. In the 60 west there is no alteration to notice since last reported on. The new lode in the 50 west, although large and producing a little tin, is at present poor; in the east end it is worth 6*l.* per fm., and in the rise above this level, 8*l.* per fathom. The Pink lode, in the 50 west, is producing some good tinstuff, but in a somewhat unsettled state. In the 50 fm. level cross-cut south a very good flat branch of tin has been met with on the western side of the cross-course; this looks as if another lode is not far off. The Pink lode in the winze below the 40 fm. level is worth 8*l.* per fathom. The tribute pitches, on the whole, are much the same as a month since, and the tutwork bargains more productive.

POLBREEN.—March 27: The lode in the 12 west is small and poor, set at 6*l.* per fathom. There is no alteration in the 22 west since last report; there is a little capel at times, and yesterday there was a good stone of tin broken, but no lode to be seen; the ground is wet and hard; price for driving, 10*l.* 10s. per fm. The tribute pitches are the same in number as last month—one in the bottom of the 12, by four men, at 11s.; one to two men and two boys, at 13s.; one in the back of the ditto, to four men, at 12s.; and one in the back of the adit, to four men, at 13s. in 1*l.*

PRINCE OF WALES.—G. Gifford, W. Gifford, March 26: In the 55 east the lode is 4 ft. wide, worth 20*l.* per fathom. In the 55 west the lode is 7 ft. wide, worth 50*l.* per fathom. In the 45 east the lode is 1½ ft. wide, worth 30*l.* per fm. In the 45 west the lode is from 4 to 5 ft. wide, worth 30*l.* per fathom. In the winze in bottom of the 45 east the lode is 3 ft. wide, worth 50*l.* per fathom. The stopes in back of the 45 east are worth 20*l.* per fathom. We shall sample, on Friday next, 150 tons of copper ore, which, from the assays we have, will fetch above our first estimate—1000*l.*, and shall have full 30 tons broken on the mine towards another sampling.

— William Mathews, March 26: As requested, I have carefully gone into the capabilities of the present machinery of this mine, and, for the following reasons, I am of opinion that no addition thereto will be required for some considerable time. With the quantity of water now pumping the present engine will drain the mine 90 fms. without being excessively loaded. The pole at present in use is 7 in. diameter, speed five strokes per minute; but should the water increase 50 per cent. no increase in the size of the lifts will be required. With regard to the power of the water-wheel, and the supply of water for hauling the stuff and crushing the ore, I think it will be found sufficient for these purposes for a year or two, as there are four large reservoirs, beside the pumped water, to counteract any falling off from the summer weather. For this year, at least, and until the mine is more developed, I am of opinion that you need not fear any hindrances in working for want of power.

PRINCE OF WALES.—J. Gifford, W. Gifford, March 29: We have sampled three parcels of copper ore to-day, computed total 153 tons; and if the committee think it necessary we can sample from 80 to 160 tons by the latter end of April next comfortably. The mine continues to look well; in fact, taking every point into consideration, we never saw the mine looking better.

PROSPER UNITED.—J. Nicholls, W. Glanville, J. Hall, March 28: The lode in the 50, east of Hosking's, is producing good stones of ore. The 60 and 70 east have reached the cross-course, and are suspended for the present. The 60 winze is worth 10*l.* per fm. for copper and tin. The rise in back of the 70 is worth 8*l.* per fm. The lode in the 80 east is small and poor. The lode in the 90, west of Hand's, is worth 7*l.* per fm. for tin; the stopes in back of this level are worth 12*l.* per fm. The lode in the 80 west is 2 feet wide, saving work for tin. The lode in the 70 west is unproductive. The rise in back of the 70 is producing saving work for tin. The 60 west, on Moor lode, is producing good stones of ore. The 60 west, on Gwallon lode, is worth 7*l.* per fm. for tin; the stopes in back of this level are worth 10*l.* per fm. for copper and tin. The 50 west is producing saving work for tin. No other charge to remark on.

REDMOOR.—T. Taylor, March 28: There is less spar in the cross-cut south, and the ground is better for driving. The killas is full of faces, containing small particles of mundic. We have more water oozing from the end, but are not yet through the cross-course.

ROSECLIFF AND TOLCARNE.—R. Pryor, J. Phillips, March 27: The ground in the 30 cross-cut, north of Lindo's engine-shaft, is a little harder for progress, and the end not letting out so much water since we passed through the last lode. We have within the last 6 ft. driving cut No. 4 lode, west of the flookan, since which it has produced some rich lead, and at present the lode in the end is 2 ft. wide, which is divided into two branches, each one producing some good lead, with every indication of a further improvement as it gets out of the influence of the flookan; and the lode at this time is quite equal in its appearance and character to that within the same distance east of the flookan, so a great improvement may be shortly expected at this point. No change to notice in this level, east of cross-cut, since our last report. We have this day put the 30 fm. level cross-cut men, and the men that have been driving east of No. 4 lode, to clear the old level driven from the old mine, which we think will lower the water, so as to get in the 20 at the old engine-shaft. The old engine-shaft level is cleared to within 2 or 3 fms. of the 20, and we hope to effect a communication from this shaft, western mine, in about a fortnight's time; this will enable us to see what lodes there have been cut in the cross-cut driven north by the old workers, as well as give good ventilation.

ROSEWARNE CONSOLS.—John Nancarrow, Richard Knuckey, March 26: In the 100, east of Ellen's, there is now a well-defined lode in the bottom of the end, with more ore than last week, and we expect a further improvement shortly. The east stope, in the back of the 80, is worth 6*l.* per fathom. A rise in the back of the 80, west of the stope, yields ore to save, and is likely soon to become valuable. The lode in the 80, west of sump, looks better, and contains a little ore. The lode in the 70, west of sump, looks promising; the ground is rather harder than usual. The pitches are looking rather better. We have sampled to-day 27 tons of good ore.

SORTRIDGE CONSOLS.—R. Jackson, March 28: Hitchins's engine-shaft is down 9 ft. below the 134; the ground is favourable for sinking, and congenial for mineral. In the 40, driving south-west of the eastern cross-course, no lode has been met with. There is no other change to notice.

SOUTH CONDURROW.—J. Vivian and Son, Wm. Williams, March 23: In King's shaft, sinking below the 61, there is no alteration worthy of notice since last report. In the 61, east of King's shaft, we are driving on the north side of the lode for greater speed. In the 61, west of King's, shaft, the lode is improving in appearance. In the 51, west of King's shaft, we have allowed the lode to stand in the last few feet driven, in order to get forward more quickly, and rise against the winze sinking from the 40 fm. level. We have to-day commenced rising on the north side of the lode, and expect to communicate in a day or two. In the winze sinking under the 40, west of King's shaft, the lode is producing copper ore, worth 20*l.* per fathom. In the 30, west of Vivian's shaft, the lode is 2 ft. wide, with a small leader of copper ore on the south wall. We are rising in the back behind this end, and breaking some good copper ore, worth about 7*l.* per fm. There is nothing new to remark on in the old Tye shaft, now about 1½ fm. below the 20 fm. level.

SOUTH DARREN.—J. Boundy, March 25: No lode has been taken down in the 60 west since my last report. In the 50, west of the cross-course, the ground has become more settled, and the water is issuing very strongly from the end; judging from present indications, I think a great improvement may be shortly expected. All other points are much the same as last reported. We have been compelled to suspend our surface operations for the past week, owing to the severity of the weather, the frost, snow, and high winds being more severe than experienced for many years. We have now a change in the weather, and the pumping wheel is again working, together with surface operations.

SOUTH EXMOUTH.—J. P. Nicholls, G. Maunder, March 27: In the cross-cut east from the 90 north we have intersected the east lode, and have cut into it about 2 feet, but have not as yet seen the east wall of the lode; the part seen consists of white iron, quartz, with a little mundic and blende. The lode in the 90 north is about 2 ft. wide, consisting chiefly of decomposed white iron, quartz, killas, and blende. The stope in the bottom of the 75 north is yielding ¼ ton of lead ore per fathom. The lode in the 75 north is more than the entire width of the level; the part being carried consists of white iron and quartz, with occasional squats of lead ore on the western wall. The stope in back of the 60 is yielding 4 cwts. of lead ore per fathom.

SOUTH HERODSFOOT.—W. Goldsworthy, March 28: We are pushing on the cross-cut as fast as possible; the ground is a little harder than it has been, but I think we shall have a change soon, as it is getting a little wetter. The engine and pitwork are in good order, and working well.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, March 23: The sumpmen have been fixing a lift and putting in some main rods this week; therefore we have no alteration to report in the shaft. The lode in the 20 east is 2½ ft. wide, and producing stones of copper ore—a most promising lode.

TOLCARNE.—March 27: In the 60, west of the cross-cut, the lode is 18 in. wide, consisting of spar and good stones of ore—a promising level. The lode in the 50, west of the cross-cut, is 15 in. wide, producing stones of ore. In the 40, west of the cross-cut, the lode is 14 in. wide, producing ½ ton of ore per fathom, worth 30s. per fathom; price for driving, 4*l.* 10s. per fathom. The lode in the 20, west of the cross-cut, is 18 in. wide, producing stones of good ore—a kindly lode. In the adit level cross-cut south the ground is easy for driving; we have a patch of elvan in the end, and a branch of spar, and we are of opinion that we are getting near a lode.

TREVENEN AND TREMENHEERE.—J. Medlyn, C. George, March 27: Trevenen shaft yields saving of low quality. The 197 end is worth 6*l.* per fathom; the stope in this back is worth 6*l.* per fathom. The 172 end is fair and congenial for producing tin, and will be within 6 fathoms of the line of the winze above by setting-day. The 162 will be holed to the winze to-morrow. The 150 end shows indication of improvement. We have cut the whole ground which which accompanies the shoot of tin in the 125. No. 1 stope in this level is worth 8*l.* per fathom; No. 2, 8*l.*; and No. 3, 6*l.* per fathom. The three stopes in the 125 are worth on an average 10*l.* per fathom. This tin dips east fast, and we believe we shall cut it in the 150 end in a short time. We have 13 tributers, making fair wages at 10s. 6d. in 1*l.*

TREWEATHA.—T. Foote, J. Scoble, March 27: In the 40 fm. level south we still continue to drive by the side of the lode, but shall commence cutting through the lode to-morrow. The lode in the 30 north is 3 ft. wide, producing 4 cwts. of lead per fm.; the stope in the back of this level is yielding 3 cwts. of lead per fm. The lode in the winze in the bottom of the 30 south is 2½ ft. wide, producing saving work, and the ground more favourable for sinking. We have nearly completed the tramroad in the 30 north to the end. Water still in the 40, as it is increased owing to the very heavy rain that we have had for the past week. Engine and pitwork well.—South Mine: The lode in the 75 fm. level at present is poor, owing to a small slide passing through the lode; no doubt but what the lode will improve again as soon as we get off the influence of the slide. The ground in the cross-cut in the 63 west is still very hard for driving, consequently our progress is slow. The tribute pitches much the same, and the men getting fair wages. The engine and pitwork at this shaft are in good condition, and keeping the water easily.

VIGRA AND CLOGAU.—Wm. J. Holman, March 28: The stope east, in No. 2 adit, has yielded visible gold during the week; we expect shortly to cut this shoot further east in the bottom of No. 3 sink, now being sunk towards it. The No. 2 adit end east is in a fine lode, 8 ft. wide. The No. 4 sink is progressing well. The adit end west is in a disordered state, being close upon the slide. The No. 1 stope west is being driven forward to cut the first shoot of gold met with in the No. 2 level east. A rise is going up in back of the stope upon a shoot of gold met with at the junction of the two levels. The opening upon the back of No. 1 lode is being continued east of the former great bunch of gold, and the lode looks well. The shallow adit east remains without change. The frost has been succeeded by heavy rains, and our stamps are in full work.

WEST CARADON.—W. Johns, N. Richards, March 27: The sinking of Elliott's engine-shaft below the 170 is going on satisfactorily. On Downing's lode, in the 170, both east and west of cross-cut, the lode is still split up into branches, producing saving work. Allen's lode, in the 170 east, is presenting a very kindly appearance. Clymo's lode, in the 128 west, since we have commenced to open out on it, is greatly improved. The same lode in the 92, west of little cross-course, is about 1½ ft. wide, composed of finor-spar, quartz, and spotted with yellow copper ore. Owing to so much heavy rain of late the water has increased in Marina's shaft; this will soon subside when the dry weather settles in; the class of ground in the shaft is highly congenial for mineral.

WEST GODOLPHIN.—J. Vivian and Son, J. Pope, March 28: The new shaft has now been sunk on the course of the lode to the depth of 10 fms., and continues of the same value as when first set—10*l.* per fathom for tin. We intend to sink 5 fathoms deeper, and then drive east and west to lay open reserves and stoping ground. The lode in the deep adit level, east of Charlie's shaft, on the caunter lode, is 1 feet wide, producing saving work for tin. The works at surface about the new shaft are now completed.

WEST GREAT WORK.—S. J. Reed, March 27: The great north lode, in the 40 fm. level east and west of flat-rod shaft, is gradually improving as we get under the dip of tin ground gone down in the bottom of the 30 fm. level. The 30, east from said shaft, has improved, now worth 16*l.* per fathom, with indications of further improvement; this level, driving east, is opening good tribute ground, worth 6*l.* per fathom. The winze sinking below the 30, east of shaft, is worth 12*l.* per fathom. We have passed through a branch of the great cross-course in driving east at the 20 fm. level; The lode is worth 5*l.* per fathom for tin. The winze in the bottom of this level is worth 6*l.* per fathom. We have a fine-looking lode in the 8 fm. level west, which is opening good tribute ground. Our sale of tin to-morrow will be 8 tons for the month, and will leave a profit of 150*l.*

WEST GREAT WORK.—S. Harris: The 40 fm. level end is driven east of shaft 6 fms., the first 4 fms. unproductive; in the last 2 fms. the lode has improved, and at present produces good stones of tin. The 20 is driven east of shaft 35 fms.; the whole of this ground has been productive; the lode in the present end is 18 in. wide, worth 20*l.* per fm., driving at 50s. per fm. A rise in the back of this level, 9 fms. behind the end, is up 3 fms. on a good lode, worth full 12*l.* per fm.; also a winze sinking in the bottom of this level, 9 fms. east of the shaft, and 3 fms. east of the end below (the 40), on a lode worth from 15*l.* to 20*l.* per fm. The 30 is driven west of shaft 29 fms., and has laid open some profitable ground; the end at present poor. The 20 is driven east of shaft 32 fathoms, on a lode varying in value from 5*l.* to 10*l.* per fm., and most of the ground in the back stoped away. The copper lode that have been reported on is running parallel with the tin lode, but to this I do not attach much importance. In conclusion, I can say I never inspected a young mine in a better position; the tin that has been raised has principally come from explorations, as nearly all the ground is standing in the 30, back and bottom, both east and west of this shaft, and I think the mine well worthy attention.—[Since the above report was written the mine has much improved. It is stated that the end in the 30 west is worth 50*l.* per fm., and that the 20 also is improved.]

WEST MARIA AND FORTESCUE CONSOLS.—William Skewis, J. Donnal, March 28: Capel Tor Lode: The Capel Tor lode is cut through in the 60, north of Maria engine-shaft, proving to be about 10 feet wide, but is at this place disordered. The lode has been taken down in the 50 east since last report. The lode in the stope in the back of this level is worth 9*l.* per fathom. The lode in the stope in the back of the 20 is worth 8*l.* per fathom.—West Maria Lode: The West Maria lode, in the 60 east, is over 3 feet wide, and has much improved, it is composed of capel, mundic, and copper ore, yielding of the latter 1 ton per fm., with good prospects of further improvement. The lode in the 50 east is 4 feet wide, yielding 2 tons of ore per fathom. The lode in the rise, and the stope in the back of this level, are each worth 10*l.* per fathom. The lode in the 40 east is 3 feet wide, composed of capel, quartz, abundance of mundic, and yielding 1 ton of ore per fathom—a very promising lode.

WEST ST. IVES.—T. Uren, March 28: The east and west lode still continues to look well, improving more for tin. The caunter lode is much the same as when I last wrote.

WEST WHEAL KITTY.—W. Vivian, March 27: In the adit end, west of the western shaft, the lode is from 6 to 7 ft. wide, worth about 13*l.* per fathom. On the south lode, in the adit level, the lode is 3 to 4 feet wide, worth about 7*l.* per fathom. In the other parts of the mine there is no change since last week.

WHEAL BULLER.—James Inch, March 27: Stevens's Shaft: The 92 east is worth 15*l.* per fathom. The 92 west is producing low-quality work. There are about 8 fathoms more to get under where the lode in the 80 was worth 30*l.* per fathom. The 80 west is worth 10*l.* per fathom. The 80 east is worth 15*l.* per fathom. The winze under the 80 is worth 30*l.* The stope in the bottom of the 80, west of cross-course, is worth 15*l.* per fathom. The stope in the back is worth 20*l.* per fathom. The 70 east is worth 12*l.* per fathom. The stope in the back of the 60, west of Hocking's, is worth 20*l.* per fathom. The 80 east is worth 5*l.* per fathom. I consider our prospects for tin are very cheering. Since last account we have put in 300 fathoms of flat-rods. The water is in fork at Kistle's, 8 fms. below the 80. About 150*l.* extra costs are included in to-day's accounts.

WHEAL CREBOR.—J. Gifford, March 26: On Saturday last the following bargains were set:—The 120 east to drive by the side of the lode, by four men, stent the month, at 8*l.* per fathom. The 120 west to drive by the side of the lode, by six men, stent the month, at 6*l.* per fathom. The 108 east to drive by two men, stent 2 fathoms, at 2*l.* per fathom; the lode is 3 feet wide, and yielding 1 ton of copper ore per fathom, worth 4*l.* The 96 fathom level cross-cut south to drive by two men, stent the month, at 3*l.* 10s. per fathom. The winze in the bottom of the 96 east, by two men, to take down the lode, at per bargain 2*l.*; the lode is 2½ feet wide, and worth 8*l.* per fathom. The 96 east to drive by two men, stent the month, at 3*l.* 10s. per fathom; the lode is 2 feet wide, composed of capel, quartz, and peach, with occasional stones of copper ore and mundic intermixed—a kindly end. The 84 east to drive by two men, stent 2 fms., at 3*l.* per fm.; the lode is 3 feet wide, spotted with mundic and copper ore. A pitch in the back of the 84 east, by two men, at 10s. tribute, and 12s. 6d. per produce. Two other pitches in the back of the 84 east, with two men in each, at 12s. 6d. tribute and 12s. 6d. per produce. One pitch in the back of the 108 east, by two men, at 10s. tribute and 12s. 6d. per produce.

WHEAL EDWARD.—G. Rowe, March 23: We have drawn all the tributers' ore to surface, and are now busily engaged in preparing for the next sampling, which we calculate will be about 25 tons of middling quality ore. I hope the copper standard will improve.

WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, March 23: The shaftmen have commenced cutting ground around the new shaft in the 120, preparatory to sinking. The lode in the 120 west is 2½ ft. wide, composed of gossan and quartz, yielding a little tin, but not to value. The lode in the 100 east is 18 in. wide, principally composed of quartz. The lode in the stope above the 100 east is worth 5*l.* 10s. per fm. The lode in the stope below the 90 east is worth 7*l.* per fathom. In the 90 cross-cut, north of the new tin lode, we have intersected a a lode 1 ft. wide, composed of quartz, &c., where we find stones of tin. In the eastern side of the cross-cut there is a branch yielding stones of rich ore; we shall most likely blast a few holes in this direction to see if it will improve. The men are getting on pretty well with the cutting of the ground for the balance-bob in the 80. The lode in the rise above the 80 east is 2½ ft. wide, worth 6*l.* per fm. The lode in the stope above this level is worth 5*l.* per fm. The lode in the winze sinking below the 66 east is 2 ft. wide, worth 6*l.* per fathom. The lode in the boundary shaft is small.

WHEAL KITTY (St. Agnes).—Stephen Davey, W. Polkinghorne, March 23: There is no change worthy of remark in the 82, west of Holgate's shaft, since our last report.—Pryor's Lode: The lode in the new shaft, sinking below the 65, is still large, and producing saving work for the stamps. In the 65, driving west of shaft, we are still driving south, in order to cut the lode, which is thrown in that direction. In the 54, driving west of shaft, the lode is worth for tin 7*l.* per fathom. The lode in the rise in the back of this level is still worth for tin 13*l.* per fathom. In the 44, driving east of shaft, the lode is worth for tin 4*l.* per fathom.—Wheal Vottle Lode: In the 44, driving west of cross-cut, the lode is poor. In the 24, driving east of cross-cut, the lode is worth for tin 4*l.* per fm. In this level, driving west of ditto, the lode is poor.

WHEAL KITTY (Uny Lelant).—Wm. Rosewarne, March 28: North Russoe Lode: The lode in the 150, east of the winze, west of Bolitho's rise, is worth 6*l.* per fm. The lode in the 140, east of Bolitho's rise, is producing saving work for tin. The Carbona at the 120, west of Bolitho's rise, is worth 14*l.* per fm.—Gowan Lode: The lode in the 90, east of Roger's shaft, is worth 3*l.* per fm. The lode in the winze sinking below the 80, east of Roger's shaft, on the north part, is worth 3*l.* per fm.—North Gowan Lode: The lode in the 50, west of the rise, west of Roger's shaft, is worth 3*l.* per fm.—South Russoe Lode: The lode in the boundary shaft, sinking below the 20, is worth for the lehgth of the shaft (8 ft.) 11*l.* per fm. The lode in the 20, east of the boundary shaft, is worth 5*l.* per fm.

WHEAL MARY ANN.—P. Clymo, J. Harris, J. Stevens, J. Skeat, March 28: Clymo's shaft is sunk 12 fms. under the 220 fathom level. The cross-cut in this level is extended 20 fms. towards the lode. In the 210 north the lode is 1 foot wide, worth 4*l.* per fathom. In the same level south it is 3 feet wide, worth 16*l.* per fathom. In the 200 north it is 2½ feet wide, worth 8*l.* per fathom. In the same level south it is 2 feet wide, worth 9*l.* per fathom. In the 190 north it is 1½ foot wide, worth 8*l.* per fathom. In the same level south it is 2 feet wide, worth 10*l.* per fathom. In the 180 north it is 1½ foot wide, worth 4*l.* per fathom. The stopes and pitches are producing much the same as usual. We have this day sold two parcels of lead ore—No. 1, computed 54 tons, to Messrs. Stock and Co., at 24*l.* 2s. 6d. per ton; and No. 2, computed 24 tons, to the Trustees of the Treffy Estate, at 13*l.* 11s. 6d. per ton.

WHEAL SPARNON.—W. Tregay, E. Chegwin, March 23: Jardine's Shaft: On Pulsford's lode, in the back of the 60 west, the pitch is worth 12*l.* per fm. for tin and copper ore.—Sump: The north lode in the 45, east of cross-course, is productive for stones of copper and tin. The north lode in the 45, west of cross-course, is improving in appearance, and producing good stones of copper ore and tin, ground favourable for driving. The 30 east has been cleared home to the cross-course, and the north cross-cut cleared to the 40 fm. level; there is a winze here which we expect to clear to the 45 in the coming week, thereby perfecting the ventilation.—Belfry Shaft: The lode in the 60, west of this shaft, has much improved, and is now worth 8*l.* per fm., with prospects of further improvement. The south lode in the 45, east of this shaft, produces good stones of tin, a very kindly lode, ground favourable for driving. We expect to commence working the ground on the main lode, east of old sump, on tribute, next week. No other change to report.

WHEAL UNY.—S. Coade, M. Rogers, March 23: There is a good improvement in the lode in the 130, west of incline shaft; the lode, or part carrying, which is 4½ ft. wide, is worth 15*l.* per fathom. The other parts of the mine are of the same value as reported on last week.

FOREIGN MINES.

CAPE COPPER.—Feb. 6: A further detachment of fifty convicts had been sent to Namaqualand. The boiler at the reduction works had been completed, and the operations satisfactorily resumed a few days before the dispatch of the advices. No discoveries had taken place at Nababeep and Koperberg, and the staff employed at the former mine were about to be removed to other trials. At Ookiep Mine no material change had occurred; the extraction for the month of January was 430 tons. Although the ordinary carrying season had not yet commenced, 108 tons of ore had been dispatched from the mines. The present mail steamer brings 110 tons, and during the past month the arrivals at Swansea have been the Ocean King, William Graham, Glenavon, and Fearless, bringing together 1580 tons of ore, and 50 tons of regulus and metal.

BRITTANY.—J. Trevillion, March 26: In the adit end the ground continues much of the same character as when last reported on. In the 44, north of shaft, the lode is 2½ feet wide, composed of capel, white iron, and good spots of lead—a very promising-looking lode. The water has very much increased in this end, which I consider is a good indication. The ground is favourable for driving; present price, 4*l.* per fathom. We have finished the stope north, and have placed the men south of shaft, where the lode will yield 5 cwts. of lead per fathom. But little has been done in the shaft since my last report, owing to the increase of water from the 44 north, and the heavy falls of rain of late, and with no less than 52 fathoms of drawing-lifts in changing, so many boxes has caused a lot of lets. To remedy this we have put down wood rods from the adit level, and hope to fix the plunger-lift in the 44 by the end of the present week, which will make a great saving in every respect.

CHONTALES.—W. C. Paul, Feb. 6: Consuelo: During the past month operations have been much retarded, owing to the discharge of native labourers, consequent on the outbreak of cholera in the country, and, at the same time, a revolutionary movement, which gave us some apprehensions as to getting our supply of cash to pay our labourers and food to keep them. The work, with one exception, has been done by our English miners—viz., securing No. 1 level east. No. 3 level has been driven east by native labourers, 4 varas 2 ft.; the lode is about 3 ft. wide, hard, and at present unproductive. This lode, I must mention, is never productive in hard ground, as at present. I expect to drive about 15 fms. before getting under or into the rich shoot of ore gone down from the levels above. Nothing has been done in Estrella since last report. The frame of the new wheel has been fixed in its place, and other parts of the machinery are now going on satisfactorily—that is, with the small force engaged about it—two English carpenters, two native ditto, and six native and English labourers.—San Antonio: Operations here, during the past month, have been entirely confined to securing the different levels requiring repairs. Water was too slack to admit of working the mill, which consequently has not been at work since Jan. 14.—Santo Domingo: Here we have had one pare of men securing an old adit level near the surface, which was in bad repair. Our future working will not be at all delayed by the present shallow runs of ground, as it will all be entirely below the present excavations, and the old ground worked from under. House building has gone on satisfactorily, and the general surface work—that is, for the small number of men employed. The machinery now in crurse of erection, plans, sections, and particulars of which I send you by this mail, has been thrown back during the past month, but I hope about six weeks more will complete it, when we shall commence other machinery at the Pavon on the same plan. I write you about machinery in another letter.

SAN ROQUE.—C. Remfry, March 16: We have resumed, as a trial, the sinking of Castro's winze in bottom of No. 2 level, west of Garrido's shaft, and have sunk 1 vara 1 ft. 3 in., or say to the depth of 13 varas, 0 ft. 3 in. below the bottom of No. 2 level. This winze has been stopped on account of the water since Dec. 1865. No. 3 level, driving east of San Francisco engine-shaft, has been advanced 7 varas 0 ft. 3 in. in a productive lode; latterly the lode has become more open, letting down more water than hitherto, but notwithstanding this fact the water-line in Garrido's shaft lowers but very little indeed. San Francisco engine-shaft has been deepened 2 varas 2 ft., or say to 22 varas 1 ft. below No. 3 level. We are sinking other 3 or 4 feet as a provisional fork for pump, when we intend cross-cutting to lode for No. 4 level before sinking further. No. 3 level, west of San Francisco shaft, has been driven 8 varas 2 ft. 3 in., without any notable change in the disturbed state of the ground having taken place. No. 2 level, west of San Francisco shaft, has been extended 12 varas 0 ft. 5 in., or say 3 varas 2 ft. 9 in. beyond Tordito's winze; this winze has been sunk 6 varas 2 ft. 6 in., holing to said level on Feb. 20. Both level and winze have been during the month in productive lode, worth from 1 to 2 tons per fathom. After holing El Gerdito winze we immediately commenced another winze in No. 1 level, about 26 varas further west; this winze, Aurora, has been sunk 6 varas 2 ft. 3 in., the lode carrying a string of galena 2 inches wide; this string of ore has increased in size in the present month, measuring to-day 6 inches. No. 1 level, west of engine-shaft, has been advanced 7 varas in variable lode, at times productive, at times sterile, but always of a promising nature. No. 1 level, east of San Luis shaft, has been driven 15 varas 1 ft., the latter 10 varas being productive, the lode carrying a string of rich galena of from 2 to 3 inches wide. We hope to communicate to No. 1 level, west of engine-shaft, in the course of next week. No. 2 level, west of San Augustin shaft, has been driven 8 varas 2 ft. 9 in. in productive lode, worth about 1½ ton per fm.; the lode in bottom of the level is richer and more regular. My estimate for March month of cost of bargains in leading workings and stopes, and the produce obtainable therefrom, is as follows:—Produce, 7000 arrobas; cost, 38,425 rls.; men, 100; or say 35 men in shafts and winze to link 45½ varas, 43 men in levels and cross-cuts to drive 69 varas, 16 men in stopes to spend 140 varas, and 6 men on tribute.

PETROLEUM IN ITALY.—It is gratifying to learn that the whole of the capital necessary to develope the petroleum deposits discovered by Mr. Edward St. John Fairman, and to which reference was made in the *Mining Journal* some months since, has been raised in Italy; and evidence is now being given that the Italians are willing to rely upon their own resources for the extension of their industrial undertakings. It is stated that the Minister of Agriculture has decided to refuse an English company the right to explore some petroleum deposits lately discovered in the neighbourhood of Pescara, although, so far as the quality of the oil is concerned, they can vie with those of America. The refusal, it appears, is actuated by the desire and duty, which the Government feel bound to respond to, to give the preference to native enterprise. In consideration of Mr. Fairman's studies and researches having been crowned with the fullest success, he has had the honour of an audience of his Majesty Victor Emmanuel, at which, after making numerous enquiries upon the subject, the king determined to take the enterprise under his especial protection, and recommend it to his Government, besides conferring upon Mr. Fairman the order of St. Maurice and Lazarus, and authorising him to call the company which he has formed after himself—the Victor Emmanuel Petroleum Company. A letter from Florence, referring to the decision with regard to the Pescara deposits, remarks that there is no contesting the fact that capital does exist in Italy, and the Italians are becoming persuaded of the importance of the mineral wealth of their country, and are now determined to reap the benefits themselves, instead of allowing foreigners to profit by what by nature ought properly to belong to the Italians. The example thus set might be advantageously followed in England, which, like Italy, has an abundance of mineral wealth, which would remunerate English capitalists far better, owing to the greater facilities for personal supervision, than any foreign enterprise that could be found.

MINERAL WEALTH OF THE PACIFIC.—Wherever silver mines have been found there spring up great cities, wonderful improvements, and all the evidences of opulence. Gigantic fortunes have rewarded the early discoverers, and for generations their decendants have reaped the never-failing harvest of annual returns. The discoveries of Nevada (which were made only in the autumn of 1859) equal the most famous and fabulous of silver mines. Potosi owes its prosperity to no richer deposits than underlie the towns of Virginia, Austin, Silver City, Gold Hill, or Star City, while surrounding discoveries only prove a common fact in silver mining and their inexhaustible extent. One great fact in the history of silver mining should not be lost sight of, and that is this—wherever, in any part of the world, silver mines have been worked they are worked still, unless arrested for some explainable cause. The lack of machinery, the existence of war, and the incursions of Indians have in Mexico familiarised our minds with the idea of abandoned mines; but they have all been abandoned for some other cause than that they are exhausted. We know of no silver mining region in the world which has been worked out. The mines in Mexico, originally worked by the native Aztecs, before the Spanish Conquest, are worked still. The mines of Andes have given forth their wealth for more than three centuries: and those of old Spain have been worked from the middle ages, and are in working condition now. In Hungary, the same mines worked by the Romans before the birth of Christ still yield their steady increase. The silver mines of Freiburg, in Saxony, worked from the 11th century, know no diminution. In Bohemia, the Tyrol, Norway, and Sweden, in the Ural and Atlas mountains, and, indeed, wherever the discoveries of silver have been made, we believe, without exception, the mines continue to be worked up to the present day, and are generally more productive now than at any time in their past history. There are, of course, exceptional instances. There have been worked many mines with loss to the owner in former times, when the same mines, with proper machinery and good management, may be worked with large profits; but silver mining, for permanence and rich return, has had its parallel in no other business. The exports of bullion from Nevada for the year 1864 were $30,000,000. In 1859 there was but one house in Virginia city, and by census of 1860 the population of the entire State is given as 17,000, mostly Indians. Now Virginia city is the second one upon the Pacific coast, and ships daily about $75,000 in bullion. The investment of capital in the development of the mines discovered about that time has in five years produced results in the aggregate nearly equalling the entire products of the silver mines of Mexico for a period of 200 years. Until 1863 the eastern portion of the State, embracing the great basin between the Sierra Nevada and the Utah line, was an unexplored wilderness,—at the present time known as Austin City, and generally known as the Reese River region. When a distinguished mineralogist prophesied that in ten years Austin would have a population of 50,000 inhabitants, the prediction was treated with ridicule by some, and as one of proper encouragement by others; but it proved the deep insight of a man of science into the great wealth and inexhaustible resources of our sections, and its superiority over other well-known mining regions in the world. There is nothing yet known with which a fair comparison can be made to indicate what our State and territories may become. Ours is pre-eminently a mining State, and as such will attain an eminence of a superior grandeur, as its chief mineral is of superior value to those which have laid the foundation of the wealth and power of other people and countries of the world. The coal and iron of Pennsylvania have made it one of the richest States in the Union, and these same minerals, with tin and copper, have enabled England to encircle the globe with her commerce and power. These are mining countries working under the ad-

vantages of cheap supplies, great experience, vast public improvements, and strong Governments. With these we may make some comparison, and knowing our native wealth we can look forward with some calculation as to the future. There are yet, as ever, great mines of gold, silver, and copper in Mexico and South America, which pour floods of treasure upon the world, and build up elegant cities, with hundreds and thousands of inhabitants; but these countries have not reached to greatness, or at least do not stand in greatness to-day, because they came before their time. Their country was difficult of access, their Governments oppressive, and the people were possessed of no elements of advancement. New Nevada lies upon the broad bosom of America, and the poet has said "She leaves her white breast nearest the sky." This beautiful simile is as true as it is poetic. No founts of greater wealth can be than are the snowy hills of the silver States.

THE TIN TRADE.—The Dutch sale has passed off most satisfactorily, the whole 69,400 slabs having realised an average price of 54 fls. per 50 kilos., which is equal to about 94*l.* 10s. per ton, free in warehouse here. As this price is an advance of more than 3 fls. upon the closing quotation to end of February, it may fairly be anticipated that a gradual and permanent improvement has now set in, and as tin mine adventurers may calculate that, under the most adverse circumstances, present prices will be the lowest paid during the next six months, it must be obvious that tin mines now paying cost will prove a safe investment, owing to the excellent prospects of a speedy and considerable advance, without the usual risk of a decline. The stock of tin in the various markets is considerably smaller than at the corresponding period of last year, and we have a period of prosperity instead of panic to look forward to.

NORTH WHEAL CHIVERTON SILVER-LEAD MINE.—The operations here are going on with great vigour in developing the mine, in sinking shafts, driving levels, cross-cuts, &c. The water has been got out to the bottom of the mine, the 80 fathom level, and rocks of rich silver-lead ore have been discovered in this level, almost equal in quality or richness to that of West Chiverton at a similar depth. In about a month Mew's shaft, which is sinking below the 70 fathom level, will be communicated to this, the 80 fathom level, when good ventilation will be made, and a long run of valuable tribute ground, for some 50 to 60 fathoms in length, will be laid open, and from this part of the mine alone good returns of silver-lead ore and blende ores will be made. From the testimony of the managers of West Chiverton—Capt. Rowe, of the Great Laxey Mines, Capt. Johns, of Wheal Trelawny and West Caradon Mines, Captain Vivian, of North Wheal Crofty, Capt. Henry James, Capt. Rodgers, late agent of the Old Tamar Mines, and of lead mines in Ireland and Wales, as well as of the agent, Captain Hancock, now resident on the mine, and several other practical mine managers—all concur in the decided opinion that North Wheal Chiverton, with a proper development, in a comparatively short period, cannot fail in opening up another great prize in this district. Mr. George Noakes (the managing director of Great Wheal Vor) is the London manager of North Wheal Chiverton, which is a sufficient guarantee that this mine will be conducted in every way to the satisfaction of the shareholders. The important discovery of rich silver-lead ore made in the 80 fm. level, in a lode about 6 to 8 ft. wide, shows an unmistakable indication of an immense deposit of silver-lead ore, and when fully prosecuted in depth—only about 10 fathoms deeper—there is no question as to the great results which will follow. The mine is in 3000 shares, and the price only 4*l.* per share, as will be seen by the prospectus, in another column of this day's Journal. After paying the present proprietors for the property, and all liabilities up to the end of the present month (March) there will be 5000*l.* left to develope the mine, which is considered ample, with the returns of lead ores, to bring the mine into a profitable position. It is estimated that, in consequence of the easy nature of the ground, and the light water-charge, the monthly cost will be about 300*l.* It is stated that several of the West Chiverton, Great Laxey, Great Wheal Vor, North Wheal Crofty, East Wheal Lovell, Wheal Trelawny, and other shareholders have already applied for a good interest in this mine, and there is every reason to believe that they will be well rewarded.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

GREAT WHEAL VOR.—The winzes below the 194 fathom level look well, and the lode in the 204 is enlarged, and holds on well. The 174, west of Ivey's, has improved, and the mine generally looking well.

NORTH WHEAL CHIVERTON is opening out well, and bids fair to be another great prize in this district. The discovery of silver-lead ore in the bottom or 80 fm. level is of rich quality, and similar to that of West Chiverton.

WEST MARIA AND FORTESCUE.—The Capel Tor lode, in the 60, is cut into 10 ft., with mundic and stones of ore, and not to the hanging wall yet. If the cross-cut had cut the lode 15 fms. further east, under where the 50 cross-cut intersected it (worth 10 tons per fathom), it is believed a fine course of ore would have been discovered. The day is not far distant for something good being found in this mine. The last sale, realising 183*l.* 14s., shows a better price obtained for the ore.

CRELAKE.—The sale of 50 tons (250*l.*, with mundic), we believe, meets the costs for the two months.

GUNNISLAKE (CLITTERS).—It is worthy of notice that the highest price paid for copper ore at the sale on March 21 was for that of this mine—30 tons, at 13*l.* 4s. per ton. The amount, 618*l.* 8s., was for two months, against a cost of 400*l.* This mine is doing well for copper alone, and now the price of tin is rising the sales should be renewed, and large profits made.

TREWAVAS TIN AND COPPER MINE.—A company is now in course of formation to work this mineral ground, which is situated in the parish of Breage, Cornwall, and is held under Mr. J. J. Rogers, at 1-18th dues. In the old workings, between 1835 and 1845, the mine was very rich, producing upwards of 110,000*l.* worth of ore. The main object in contemplation is to extend the adit on the Nimble Cutter copper lode, to cut the great tin lode, from which good results are anticipated. The mine is divided into 256 shares, and at the meeting, held last week, a call of 5s. per share was made, payable to the manager and purser, Capt. J. R. Ridington, by that meeting appointed.

The MINERA MINING COMPANY (near Wrexham) have met with a vein producing fully 10 tons of lead ore per fm.; and also other places in the works at present are yielding large quantities of lead, and have the appearance of doing so for some time to come.

CAPE CORNWALL MINE is still looking well for improvement. The lode in the 90 keeps its value for tin, while the 70 west is very kindly for copper, some capital stones of ore having been broken in the end. The development of this property is looked upon with much interest, it being considered that the prospects of the western ground are very encouraging.

NORTH WHEAL CROFTY.—Mr. A. E. Paull, the purser, being about to resign, in consequence of entering into another description of business, Mr. W. Watson, of Plymouth, who has had considerable experience in Cornish and Devon Mines, has been solicited to accept the office. The appointment will be made at the meeting, on Thursday.

GEOLOGICAL SOCIETY OF LONDON.—March 20: Prof. Warington W. Smyth (President) in the chair. Jas. Danford Baldry, Queen-square-place, Westminster, and Coutts Trotter, Cadogan-place, S.W., were elected Fellows. The following communications were read:—

1.—"Report on Recent Discoveries of Gold in New Brunswick," by W. S. Shea: communicated by the Earl of Carnarvon. Mr. Shea gave, in his report, a detailed account of his explorations into the gold-bearing gravels of certain river-valleys in the counties of Victoria, Northumberland, Carleton, and York, in Central New Brunswick. He had been enabled therefrom to draw the following inferences:—1. That the gold in these alluvial deposits is derived from the quartz veins penetrating the rock of the district.—2. That the gravel, which contains pebbles of all sizes, was derived from the disintegration of the rocks of the district.—3. That, judging from the richness in gold of paying drift in California, it is probable that these auriferous gravels will pay also.

2.—"On the Discovery of Coal on the Eastern Slope of the Andes," by W. Wheelwright: communicated by Sir R. I. Murchison. The author reported the occurrence of beds of coal on the eastern slope of the Andes, between the cities of Cordova and San Juan, about 25 leagues east of the latter city.

3.—"On the presence of Burbeck Beds at Brill, Buckinghamshire," by the Rev. P. B. Brodie, M.A., F.G.S.

4.—"On the Lower Lias or Lias Conglomerate of Glamorganshire," by W. H. Bristow, F.R.S., F.G.S. of the Geological Survey of Great Britain.

5.—"On Abnormal Conditions of Secondary Deposits when connected with the Somersetshire and South Wales Coal Basins, and on the Age of the Sutton and Southerndown Series," by Charles Moore, F.G.S.

On Wednesday the following papers will be read:—1. "On the Dentition of *Rhinoceros leptorhinus*," by W. Boyd Dawkins, M.A., F.G.S.—2. "On the Drift of part of Warwickshire," by the Rev. P. B. Brodie, M.A., F.G.S.—3. "On the Strata which form the Base of the Lincolnshire Wolds," by J. W. Judd, F.G.S.

SOCIETY OF ENGINEERS.—On Monday evening a paper will be read On Pumping Engines for Town Water Supply, by Mr. Henry Davey.

DUNSTER, NEAR MINEHEAD, SOMERSET.—An important discovery of coal, copper, and iron, of a very superior quality and in great abundance, has just been made by Capt. Richard Gregory. The sett is very extensive, and is favourably situated for the shipment of the ores at Minehead.

COAL IN INDIA.—The coal fields at present discovered in Chindwarra extend over a surface of upwards of 50 miles, and varying in thickness of good coal from 3 to 13 feet. There can be little doubt that these coal fields are the most important discoveries that have been made in India for years. The official report gives a very high opinion of the coal as a fuel, its freedom from iron pyrites, and the great facility in working it. It would be needless to say more about the character of the coal after such an elaborate report by the Geological Survey officers; but it is our wish to show its value to the province, and more especially to the approaching Nagpore Railway.—*Friend of India.*

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, MARCH 29, 1867.

COPPER.	£ s. d.	£ s. d.
Best selected..p. ton	82 0 0–	83 0 0
Tough cake and tile	81 0 0–	82 0 0
Sheathing & sheets	84 0 0–	—
Bolts	88 0 0–	—
Bottoms	90 0 0–	—
Old (Exchange)	72 0 0–	—
Burra Burra	83 10 0–	84 0 0
Wire ..per lb.	0 1 0	0 1 0½
Tubes „	0 1 0	

BRASS.	Per lb.
Sheets ..per lb.	10d.– —
Wire „	8¼d.– —
Tubes „	11d.– —
Yellow Metal Sheath.p. lb.	7¼d.– —
Sheets „	7 d.– —

SPELTER.	Per ton.
Foreign on the spot	21 15 0
„ to arrive	22 0 0

ZINC.	
In sheets	28 0 0

TIN.	
English blocks	92 0 0
Do., bars (in barrels)	93 0 0
Do., refined	95 0 0
Banca	94 10 0
Straits	£88 10 0– 89 0 0

TIN-PLATES.*	Per box.
IC Charcoal, 1st qua.	1 10 0– 1 12 0
IX Ditto, 1st quality	1 16 0– 1 18 0
IC Ditto, 2d quality..	1 6 0– —
IX Ditto, 2d quality..	1 12 0– —
IC Coke	1 4 6– 1 5 0
IX Ditto	1 10 6– 1 11 0
Canada plates,p.ton..	13 10 0– —
Ditto, at works	12 10 0– —

IRON.	Per ton.
Bars Welsh, in London	6 10 0– 6 15 0
Ditto, to arrive	6 10 0– —
Nail rods	7 0 0– 8 0 0
„ Staffd. in London	7 10 0– 8 10 0
Bars ditto	7 10 0– 9 10 0
Hoops ditto	8 12 6– 9 12 6
Sheets, single	9 10 0–11 0 0
Pig No. 1, in Wales	4 5 0– 4 10 0
Refined metal, ditto	4 0 0– 5 0 0
Bars, common ditto	5 15 0– 6 0 0
Do. mrch. Tyne or Tees	6 10 0– —
Do., railway, in Wales	5 15 0– 6 0 0
Do., Swed. in London	10 5 0–10 10 0
To arrive	10 10 0– —
Pig, No. 1, in Clyde	2 14 0– 3 6 0
Do. f.o.b. Tyne or Tees	2 9 6– —
Do. Nos. 3,4, f.o.b. do.	2 6 6– 2 7 0
Railway chairs	5 10 0– 5 15 0
„ spikes	11 0 0–12 0 0
Indian Charcoal Pigs, in London p. ton	7 0 0– 7 10 0

STEEL.	Per ton.
Swed., in kegs(rolled)	14 0 0–14 10 0
„ (hammered)	16 0 0–16 10 0
Ditto, in faggots	16 10 0–17 10 0
English, spring	19 0 0–23 0 0
QUICKSILVER (p. bottle)	6 17 0– —

LEAD.	Per ton.
English Pig, com.	19 10 0– —
Ditto, LB.	19 15 0– —
Ditto, WB	22 5 0– —
Ditto, ordinary soft	20 0 0–20 10 0
Ditto, sheet	20 5 0– —
Ditto, red lead	20 15 0– —
Ditto, white	27 0 0–30 0 0
Ditto, patent shot	23 0 0– —
Spanish	19 0 0– —

* At the works, 1s. to 1s. 6d. per box less.

† A Derbyshire quotation: not generally known in the London market.

REMARKS.—We regret that we are not able to report a more favourable condition of the Metal Market, which still continues in a state of considerable depression, the amount of actual business transacted being very small; indeed, if possible, during the past week there has been a greater amount of inaction than has been before experienced. Nevertheless, we still cherish the hope that matters in the metal trade will mend ere long, and that we shall see a more satisfactory business arising during the spring. The rumours which are afloat, that it is not very improbable the peace of Europe may be broken again this year are by no means reassuring, and it is earnestly to be hoped that they may not prove true, as war is at all times a great hindrance to commercial operations generally, and would be almost sure, if undertaken at the present time, and especially if it should lead to a general European war, very seriously to retard the hoped-for improvement, not only in the metal trade, but in all kinds of business, as the depression has not been by any means confined to the metal trade, but has been almost universal in all trades and business throughout the country. Although we trust, therefore, that peace may still continue to rest upon the nations of Europe, and that the horrors of war may not, at least for some time, again overspread the Continent, yet we have much fear that the signs of the times seem to tend very much in the direction of war, and that it will be only by the wisdom of Governments, and the suppression of irritated and jealous feelings on the part of Rulers, that it will be prevented.

COPPER.—No improvement whatever has occurred in this metal during the week; sales are exceedingly few, and none of any importance have taken place. It is almost impossible to mention present prices with any degree of accuracy.

IRON.—In Staffordshire more continental orders have been received during the past week, and the East Indian demand continues good. Home merchants, however, as yet refrain from giving out specifications. Parties from the United States, who have recently visited the district, speak more hopefully of the trade with that market, which is at present suffering from the reaction consequent on large exportations in anticipation of higher duties. No doubt the restoration of a settled Government, and of confidence in the Southern States, would lead to very extensive requirements for iron. The Preliminary Meeting of the South Staffordshire Ironmasters was held at Birmingham, on Thursday. There was a tolerably full attendance, and, after a brief discussion, a resolution was unanimously passed to adhere to the old scale of prices for all descriptions of manufactured iron—that is, 7*l.* 10s. for bars, and other kinds in proportion. No other resolution was before the meeting, but it is doubtful whether more than half-a-dozen of those present are able to obtain the trade prices. In Welsh the trade shows no sign of substantial improvement, and the usual quietness characterises operations at the works. There are some orders for rails on the books, and this branch of the trade is the only one that has anything like life in it, but its continuance depends, in a great measure, upon the turn matters will take as regards the American demand. The difficulties of the railway companies seriously affect the demand from home consumers, and prevent many specifications from being given out. Sellers of pig-iron report no change in business, and the current quotations are in many instances unremunerative. In Swedish iron the enquiry is only limited. In Scotch pig-iron the market still continues depressed price are, however, a trifle better. At one time the price went up to 51s. 9d. cash, but has since declined to 51s. 7½d. cash.

LEAD.—There is no appearance of activity; transactions are only limited, but prices still remain firm at the quotations.

TIN.—The market for English remains firm at the recent advance. Very little business has been done in foreign, pending the Dutch Trading Company's sale of Banca in Holland. This took place, as announced, on Thursday, and comprised 69,400 slabs Banca, and 600 slabs Billiton; total, 70,000 slabs, all which sold at 54 fls., equal to about 94*l.* 10s. delivered here. Since the result of the sale was known here, no transactions appear to have taken place in this market.

SPELTER has remained very quiet during the week, and no sales of any consequenee have taken place. The price on the spot, however, still continues firm, at 21*l.* 15s.

TIN-PLATES.—There is a fair export enquiry, and a good amount of business doing. Makers generally are well placed for orders.

STEEL and QUICKSILVER require no special comment.

The settlement of the fortnightly account in the MINING SHARE MARKET took place on Friday, and was again very heavy in Prince of Wales and a few other mines; but business during the week, though active, and with more than an average amount doing, has been rather more fluctuating in regard to prices. The standard for copper ore is down about 3 this week. In our last an error occurred in relation to the standard, which was then rather better instead of worse. The sale of Dutch tin has gone off well, and at a price to lead us to hope for another rise in Cornish tin ere long. West Chiverton shares have risen to 68, 70, but the public, at least, seem to be ignorant of any change at the mine. Chiverton Moors shares rose suddenly to 9, buyers, and then almost as suddenly dropped to 6, leaving off 5¼, 6¼. In the absence of all information from this mine, as well as West Chiverton, it is impossible to account for these fluctuations. South Caradon, 300 to 320; at the meeting, held on Tuesday, a dividend of 6*l.* per share (3072*l.*) was declared, leaving in hand 2954*l.* 6s. 1d. The profit on the two months was 2985*l.* 11s. 7d. The report of this, the richest copper mine in Cornwall, is contained in one line—"*Our prospects are still very good, with every probability of a continuance.*" This is the usual two-monthly report, and all the shareholders ever get from the agents, which may, perhaps, account for the steady price of the shares. In mines that are made subject to market operations, the agent is expected to send a detailed report twice a week, while about 20 other agents report twice a week also, according to their "lights." Some years ago the writer was at South Caradon, when it was paying 15,000*l.* a year in dividends, and there was not an end in the mine to value, the nature of the lodes being rich, but very fluctuating in value, and if all these changes, as they occurred, had been telegraphed or reported to London, a fine property would have been knocked to pieces; for every trifling and temporary change in an end, or any productive part of a market mine, is made the means of depreciating the shares, though, from the nature of lodes generally, it is very seldom they have any lasting effect on the value of the mines. South Caradon has paid over 200,000*l.* in dividends, and a short time before the shares (64th) rose to 2000*l.* each, they were offered and refused in London at 5*l.*

Prince of Wales shares rose to 58s. buyers, and were very firm till just before settling-day, when prices gave way a little, owing to sales of shares bought for speculation for the account, but they rallied again to 56s., 58s. and then left off at 55s. 6d., 57s. The 55 east is worth 20*l.* per fathom; the 55 west, 50*l.* per fathom; the 45 east, 30*l.* per fm.; the 45 west, 30*l.* per fathom; the winzes, 30*l.* per fathom; the stopes 20*l.* per fathom; the sampling is 153 tons of rich ore, leaving 30 tons more broken in the mine, and in another month 100 tons more will be sampled. Chontales Gold, 2¼ to 3; Clifford Amalgamated, 6¼ to 7; Cook's Kitchen, 11 to 12; Drake Walls, 10s. to 15s.; East Caradon, 5 to 5¼; East Carn Brea, 2½ to 2¾; East Lovell, 10 to 11; Great North Downs, 3½ to 4; Great North Laxey, 25s. to 30s.; Great Retallack, not so firm, at 3 to 3½; Great Wheal Vor, 19½ to 20; Great Laxey, 17 to 18; the lode in the main shaft, below the 220, is worth 50*l.* per fathom; at Dumbell's shaft, which is down 10 fms. below the 110, the lode is worth 120*l.* per fathom; the south sump is worth 140*l.* per fathom; the other points in operation at this mine are worth in the aggregate 1015*l.* per fathom. North Wheal Crofty, 5½ to 5¾; North Treskerby shares, after reaching 2½, leave off 1¾ to 2½; Prosper United, 3¾ to 3¾; Rosewall Hill and Ransom, 40s. to 45s. East Wheal Grenville shares have been firm, and advanced to 2¾, 3; the mine continues to improve, and the ore appears to be coming into the shaft. South Condurrow, 17s. to 19s.; Tincroft, 15 to 16; West Caradon, 9 to 9½; Wheal Basset, 65 to 67½; Wheal Crebor, 9s. to 11s.; Wheal Seton, 104 to 106; Wheal Uny, 1¾ to 1¾; West Seton, 135 to 140. Marke Valley, 4½ to 4¾; on Rosedown lode the ends are worth 13¼ tons of copper ore per fathom; Marke's lode is worth 5 tons per fathom. East Basset, 18 to 20; at the meeting held on Tuesday, the accounts showed a balance against the adventurers of 534*l.* 16s. 3d. The loss on two months was 60*l.* 17s. 6d. The tribute pitches for tin and copper are looking about the same as two months since. West Prince of Wales, 10s. to 12s. 6d. Wheal Buller, 24s. to 26s.; the mine is looking well, and the various points of operation are worth in the aggregate 137*l.* per fathom. At the meeting the accounts showed a balance against the company of 970*l.* 3s. 5d., the loss on the two months being 283*l.* 15s. 5d.; a call of 2*l.* per share was made. Since last meeting 300 fathoms of flat-rods have been erected, and extra costs incurred.

The market for Mines on the Stock Exchange during the week has been, on the whole, active, with a healthier tone, tin mines being in especial request. Great Vor, after having risen to 21¼, 22, close 19½, 20¼, ex div.; North Crofty, 5¼, 5¾; East Grenville, 2¾, 3¼; West Chiverton, in anticipation of cutting the lode in the 110, and some good buying for investment, have risen to 66, 69, closing firm; Herodfoot, 32, 34; West Basset, ½, 1; Chiverton, 7, 7¼; East Lovell, 10, 10¼; Wheal Buller, 23, 25; Devon Consols, 380, 390, ex div.; Great Laxey, 17, 17½; East Russell, 3¼, 3¾; Prince of Wales, 2¾, 2¾; East Caradon, 5¼, 5¾, in request; Great South Tolgus, ¾, ⅞; West Caradon, 9, 9½; East Basset, 20, 22. In Foreign Mines, St. John del Rey, Don Pedro, and Alamillos have been the chief features, being respectively 55 to 56, 3-16 to 5-16 prem. ex div., and ¾ to 1¼; Chontales, ⅛, ¾ dis.; United Mexican, 2¾, 3; Anglo-Brazilian, par, ⅛ prem.; Port Phillip, 11-16, 13-16; Panulcillo Copper, ⅜, ¼ dis.; Yudanamutaun, ¾, 1. North Wheal Chiverton, 4, 4¼; in clearing up the 80 fm. level good silver-lead has been discovered in the lode in the end. Chiverton Moor, 6, 6¼; considerable fluctuations have taken place in these shares on various rumours, all of which would appear to be without foundation. Westminster, 5, 5¼. Caldbeck Fells, ⅛, ¼; it is said that the mine is looking well, and leaving a small profit; shares would appear to deserve attention.

During the quarter ending March 30 the quantity of copper ore, the produce of Cornwall and Devonshire, sold at the Cornish ticketing was 29,077 tons, which contained 1968 tons 6 cwts. of fine copper, and realised 138,295*l.* 11s. 6d., being equal to an average of 4*l.* 15s. 1d. per ton of ore, and 70*l.* 5s. 6d. per ton of copper in the ore. During the same period the British, colonial, and foreign ores sold at Swansea amounted to 3914 tons, which contained 587 tons 2 cwts. of fine copper, and realised 43,817*l.* 5s. 6d., being equal to an average of 11*l.* 3s. 9d. per ton of ore, and 74*l.* 12s. 8d. per ton of copper in the ore. The average produce of the ore sold at the Cornwall ticketing was 6¾ per cent., whilst that sold at Swansea gave an average produce of about 15 per cent. From this it will be seen that the aggregate sales by ticket were 32,991 tons of ore, containing 2555 tons 8 cwts. of fine copper, and realising 182,112*l.* 17s. 0d. The subjoined is a summary of the periodical sales at the Cornwall and Swansea ticketings respectively. The ore sold at the Cornish Ticketings was—

Date.	Standard.	Prod.	Price.	Per unit.	Tons.	Fine cop.	Amount.
Jan. 3..	£107 4 ..	6⅞ ..	£4 12 6 ..	13s. 5d..	2204 ..	151 13 ..	£10,194 8
„ 10..	110 7 ..	6¾ ..	4 14 0 ..	13 10 ..	1513 ..	101 18 ..	7,083 5
„ 17..	113 15 ..	6½ ..	4 14 0 ..	14 4½.	3609 ..	236 12 ..	16,995 14
„ 24..	104 17 ..	8¼ ..	5 19 0 ..	14 4 ..	1873 ..	155 12 ..	11,161 16
„ 31..	112 8 ..	6⅜ ..	4 7 0 ..	13 9¼.	2961 ..	187 8 ..	12,919 1
Feb. 7..	114 2 ..	6¼ ..	4 6 6 ..	14 0 ..	1715 ..	106 14 ..	7,456 18
„ 21..	116 2 ..	6¼ ..	4 10 6 ..	14 5 ..	3167 ..	198 9 ..	14,334 0
„ 28..	108 15 ..	7½ ..	5 9 0 ..	14 5¼.	2158 ..	162 18 ..	11,777 4
Mar. 7..	107 18 ..	7¼ ..	5 7 6 ..	14 3 ..	2279 ..	171 9 ..	12,234 14
„ 14..	115 13 ..	5½ ..	3 11 6 ..	13 1 ..	1424 ..	77 17 ..	5,086 6
„ 21..	114 11 ..	6¼ ..	4 8 0 ..	14 1 ..	3928 ..	245 6 ..	17,299 8
„ 28..	103 19 ..	7⅞ ..	5 4 6 ..	13 8 ..	2246 ..	172 10 ..	11,752 14
		Total for the quarter			29,077	1968 6 ..	138,295 11
		Quarter ending Dec., 1866			32,183	2185 3 ..	135,973 6
		Quarter ending Sept., 1866			33,761	2186 11 ..	133,642 0
		Quarter ending June, 1866			34,466	2124 18 ..	145,455 19
		Total for the year			129,487	8464 18 ..	553,366 17
		Showing a quarterly average of			32,372	2116 4½	138,341 14
		Corresponding quarter, Mar., 1866			36,711	2220 1 ..	167,493 4

The ore sold at the Swansea Ticketings was—

Date.	Standard.	Prod.	Price.	Per unit.	Tons.	Fine cop.	Amount.
Jan. 22..	£97 16 9 ..	15 ..	£11 4 6..	14s. 11½d..	2064 ..	309 12 ..	£23,164 12
Mar. 5..	96 15 6 ..	15 ..	11 3 3..	14 10¼ ..	1850 ..	277 10 ..	20,652 13
		Total for the quarter			3914	587 2 ..	£43,817 5
		Quarter ending Dec., 1866			5172	681 13 ..	47,757 11
		Quarter ending Sept., 1866			8866	1154 13 ..	78,340 0
		Quarter ending June, 1866			15278	2390 14 ..	176,243 14
		Total for the year			33230	4814 2 .	£346,157 16
		Showing a quarterly average of			8308	1203 5 ..	86,539 9
		Corresponding quarter, March, 1866			6832	976 18 ..	81,559 4

IRISH MINE SHARE MARKET.—The chief elements for disturbing attention to business are still at hand, although they have assumed a widely different phase. Fenianism, which but a few days ago alarmed the timid, and disquieted the plotting man of business, is still occupying much attention, the "news" columns of the Dublin and provincial journals being now mostly more than half filled with accounts of the state of their respective localities, and of the arrest and examination of the late disturbers of the peace. The accounts are now largely intermixed with reports of proceedings at meetings held throughout Ireland by the friends of Government and order, expressing in warm terms their loyalty, and their sincere abhorrence of the recent events which, at the instigation of Americans, brought so much misery to many a hitherto happy family. The Roman Catholic clergy availed themselves of the feast of St. Patrick unanimously to denounce Fenianism in the strongest possible language, and the laity showed their reverence for their advice by an observance of sobriety absolutely unparalleled on any previous St. Patrick's day. From all the districts which remained loyal and quiet, those in which mining operations furnish honest occupation for the people are particularly shining forth for exemplary conduct, not a trace of Fenian taint having during the worst of times, or since, been discovered as affecting the people of the respective localities, a fact that was constantly

and consistently predicted by our Irish Correspondent. Of course, such serious interruptions to business as Ireland has just suffered, from so long a period of financial, political, and local panics, must necessarily leave very damaging effects behind for a considerable time, and, therefore, it is not surprising that business is yet very languid, and that prices even of the most valued securities, should, more or less, suffer, and transactions be on many days merely nominal. Even Government securities have for some time past been but little dealt in, fluctuations generally sympathising with London prices. Transactions in the general share market were also few, and mostly in favour of those who ventured on purchases. Mining shares, however, may be said to have suffered lenst, those of the Wicklow Copper Mining Company, for instance, having remained firm, and in strong request, at fractional fluctuations from 24*l.* per share (2*l.* 10s. paid), at which price buyers are predominating for cash, and at 24*l.* 2s. 6d. for account. Mining Company of Ireland shares have not been so steady, and offer a good field for investment at the present closing price of 16*l.* 5s. for cash and account (7*l.* paid). Connorree Mines, which were exceedingly rich a century ago, and continued so to within the last ten years, depending now chiefly on recent fresh discoveries, which, however, promise well for the future, are naturally more liable to fluctuations, and have just experienced a fall in the price of shares to 12s. 6d. each, at which, however, they were freely taken. The General Mining Company for Ireland shares have also dropped in market value, and are obtainable at 2*l.* 5s. But the speculators who have been induced to invest their money in foreign speculations, instead of devoting it to the encouragement of national enterprise, and purchased shares in the Cape Copper Mining Company, which not long ago were quoted at about 100 per cent. premium, will regret to find that there is now but a limited demand for them at par.

At Redruth Ticketing, on Thursday, 2246 tons of ore were sold, realising 11,752*l.* 14s. The particulars of the sale were:—Average standard, 103*l.* 19s.; average produce, 7⅞; average price per ton, 5*l.* 4s. 6d.; quantity of fine copper, 172 tons 10 cwts. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Feb.28....	2158	£108 15 0	7¼	£5 9 0	14s. 5½d....	£72 5 0
Mar. 7....	2279	107 18 0	7⅛	5 7 6	14 3	71 5 0
„ 14....	1424	115 13 0	5⅛	3 11 6	13 1	65 6 6
„ 21....	3928	114 8 0	6¼	4 8 0	14 1	70 8 0
„ 28....	2426	103 19 0	7⅜	5 4 6	13 8	68 6 0

Compared with last week's sale, the decline has been in the standard 3*l.*, and in the price per ton of ore about 4s. 6d. Compared with the corresponding sale of last month, the decline has been in the standard 4*l.*, and in the price per ton of ore about 6s.

The following dividends have been declared during March:—

Mine.	Per share.	Amount.
Great Laxey	£0 10 0	£ 7,500 0 0
Devon Great Consols	6 0 0	6,144 0 0
South Caradon	6 0 0	3,072 0 0
Great Wheal Vor	0 7 6	2,184 12 0
Foxdale	0 10 0	1,400 0 0
Wheal Mary Ann	0 12 6	640 0 0
East Pool	2 10 0	320 0 0
Wheal Trelawny	0 5 0	260 0 0
Don Pedro North del Rey	0 2 0	10,000 0 0
Pestarena	0 2 6	2,750 0 0
Total		£34,270 12 0

At South Caradon Mine meeting, on Tuesday (Capt. Peter Clymo in the chair), the accounts for November and December showed a credit balance of 6026*l.* 6s. 1d. The profit on the two months' working was 2985*l.* 11s. 7d. A dividend of 3072*l.* (6*l.* per share) was declared, and 2954*l.* 6s. 1d. carried to credit of next account. Captain Clymo reports—"Our prospects in the mine are still very good, with every probability of a continuance."

At the Foxdale Mines (Isle of Man) meeting, on Wednesday, the directors declared a dividend of 10s. per share.

At Wheal Buller meeting, on Wednesday, the accounts for Jan. and Feb. showed a debit balance of 970*l.* 3s. 5d., and a loss on the two months' working of 283*l.* 15s. 5d. A call of 2*l.* per share was made. It was resolved that the salaries of Capts. Inch and Mitchell be put at 2*l.* 10s. per month, and that the appointment of a second agent be left with the committee, who are requested to make the appointment at their next meeting.

At Crow Hill Mine general meeting, on Wednesday, the accounts showed a cash balance of 157*l.* 16s. 5d., and liabilities in excess, 2*l.* 3s. 8d. They have sold 30 tons 16 cwts. 3 qrs. of lead, for 758*l.*, and 68 tons of mundic for 40*l.* since the last meeting, and have now 200*l.* worth of lead ore on the mine, and about 80 tons of mundic. No call was made.

At Cuddra Mine general meeting, on Thursday, the accounts showed a cash balance of 165*l.* 7s. 10d.; and liabilities in excess, 960*l.* 13s. 8d.

At the Carnavonshire Consols Mine (special) meeting, on March 22 (Mr. H. Milford in the chair), the special resolutions were passed. Details in another column.

At the Mwyndy Iron Ore Company meeting, on Wednesday (Mr. Charles Capper, M.P., in the chair), the report of the directors and balance-sheet was received and adopted. Details in another column.

At the Linares Lead Mining Company meeting, yesterday (Mr. Crosby in the chair), the report stated that the profit for the last six months was 378*l.* 16s. 11d.—a satisfactory result, considering the diminished raisings and low price of lead. There were still points of promise in the old mine, and great prospects of success in the new; and the directors hope to be able to declare a dividend at the next general meeting. The report was received and adopted. The details will appear in next week's Journal.

At the Fortuna Mine meeting, yesterday (Mr. Charles Morris in the chair), the report stated that the profit on the working account during the six months amounted to 3633*l.* This is somewhat below the amount realised during the preceding half-year; but, considering the adverse circumstances the company has had to contend against, the result is very satisfactory. The report was received and adopted. Details will appear in next week's Journal.

At the Alamillos Company meeting, yesterday (Mr. Crosby in the chair), the report stated that considerable progress had been made during the past year in developing the resources of the mines, a great deal of dead work, from which no benefit has yet been derived, has had to be done, and hence the costs have ruled somewhat higher, but the mines are now paying their way—indeed, the directors have reason to believe they have yielded a small profit during the past three months. The report was received and adopted. Details will be given in next week's Journal.

At the New Mansfeld Copper and Silver Mining Company general meeting, on Thursday (Sir Charles Bright, M.P., in the chair), the resolutions passed at the last general meeting as to the forfeiture of shares in arrear was confirmed. The Chairman then stated that the next business before the meeting was the increase of capital rendered necessary by the alteration in the mode of working, and to meet the debt, amounting to about 16,000*l.*, which the directors had been compelled to contract. After some discussion, it was resolved that the capital of the company be increased by the sum of 25,000*l.*, by the issue of 2500 shares, of 10*l.* each, such new shares being entitled to a preference dividend of 10 per cent. per annum, with an option to the owner to convert any of such shares into the ordinary stock of the company, on giving notice not later than the 31st of December, 1872. The Chairman said that the debt of 16,000*l.* might be carried over for some little time, but from the report of the company's engineer, L. W. Ziervogel, upon whose advice the directors were now acting, at least 10,000*l.* would be required for the development of the mines to enable them to open out a sufficient quantity of reserves to keep the furnaces in continual operation. It would take about twelve months to effect this object. After some discussion, the proposition from the chair was passed, and about a third of the capital required subscribed for by the shareholders present, it being understood that in the event of the other shareholders not subscribing sufficiently, such subscriptions to have no effect. A vote of thanks to the Chairman terminated the proceedings.

The Russian (Vyksounsky) Ironworks Company Shareholders' Committee have issued (through Messrs. Harrison, Lewis, and Co., their solicitors) a circular enquiring what dissentient shareholders have applied for debentures and been refused, with a view to prevent the directors from breaking faith with those entitled to withdraw. The directors, it will be remembered, bound themselves by a regular stamped deed, signed by Mr. Austin, the Chairman, and countersigned by Mr. Courtney Clarke, the secretary, and stamped with the company's seal, to take no further proceedings against dissenting shareholders by appeal, or otherwise, to strike their names off the register, and to give them debentures for their shares. The directors announced that the debentures would be ready for issue on March 20. Many debentures were applied for and issued, but misled by the decision in Kincaird *v.* the Russian Ironworks Company, on Friday, the directors stopped the issue the following morning. Of course, all that will be necessary is to proceed for the enforcement of the engagement.

On the Stock Exchange an average amount of business has been transacted in Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—Great Wheal Vor, 21⅛, 21, 19⅜, 20⅛; Prince of Wales, 2⅞, 2⅜, 2⅞, 2⅜; South Wheal Frances, 18⅛; Wheal Buller, 24; West Basset, 1; South Condurrow, ⅞, 1; Drake Walls, ⅛; Chiverton, 7⅛; Great South Tolgus, ⅛; West Chiverton, 62⅛. 65; Great Laxey, 17⅛.—In Colonial Mining Shares the prices were:—Yudanamutana, ⅞, 1; Port Phillip, 5; General, 19⅛; Scottish Australian, ⅛.—In Foreign Mining Shares the prices were:—Pontgibaud, 8⅛: Don Pedro North del Rey, ⅜, ¼, ⅜ prem.; Chontales, 2⅛, 2⅜, 2⅛, 2⅛; St. John del Rey, 55¼.

COAL MARKET.—This week 75 vessels have come forward, mostly screw steamers. The demand for house coal has ruled dull throughout, and prices have fallen 1s. 6d. per ton on first-class coals, and rather more on other descriptions. Hartley's have remained steady, at the late quotations. Hetton Wallsend, 21s.; Haswell Wallsend, 21s.; Harton Wallsend, 17s. 6d.; Tunstall Wallsend, 17s. 6d.; West Hartley, 17s. Unsold, 2; at sea, 140 ships.

COPPER TRADE.—Messrs. Vivian, Younger, and Bond (March 29) write—Throughout the week the trade has shown signs of general depression, and, though values have not altered to any considerable extent, the want of demand is greatly felt. Australian kinds must be quoted 1*l.* per ton lower. Further sales of Chili bars have been made at 71*l.* 10s., and a small sale of regulus is reported at 14s. 3½d. per unit. In English descriptions no important business is reported.

THE IRON TRADE.—Messrs. Shaw and Thomson (March 27) say—"The iron trade since this day fortnight has been quieter in tone than at any period during the present year. One of the causes leading to this result has arisen from the embarrassments of some of the large railway companies, which have made it obvious to the manufacturers of rails that nothing beyond their most pressing wants may be expected to come into the market. It is satisfactory to find that the orders from America, Russia, and India have recently been so extensive as to make this a matter of smaller concern than it might otherwise have been. We are able to report a better demand for sheets, bars, hoops, &c., for India, and it may now be anticipated that the want of confidence which has hitherto pervaded dealings with Indian houses will gradually disappear. The state of the shipbuilding trade is slowly improving; cheap iron, and a low scale of wages, naturally tempt the wealthy steam-ship companies and large private ship owners to take so favourable an opportunity as the present to increase their fleets. We need only recur to the wants of the Government yards, to say that the next financial year promises to be as extensive as the last. In Staffordshire there are great complaints of the dulness of trade, especially amongst the second-class makers, and the rolling-mills are only at work intermittently. In Scotland the demand for manufactured iron has slightly improved. Pig-iron has been very flat; the price, however, is still above 50s. per ton, which is very high, considering that in 1852, when the trade was in the same state as it is at present, the price was only 36s. per ton. At that time the stocks were very large, and the means of production greatly exceeded the requirements. A fall of 2s. to 3s. took place last week, and it would, no doubt, have been much greater were it not that the market is supported by factitious aid. The North of England trade has been quiet; a fair business has been done in pig-iron for foreign shipment at prices about 10s. less, f.o.b., than the Scotch rates, at which, however, production is still greater than the demand. The orders for manufactured iron have been very scanty. The reduction of wages in the North of England has been accepted by the men. The Welsh works are all pretty well supplied with rail orders, though slack in bars. The manufacturers of cold-blast pig-iron have been somewhat dismayed by the large quantity of 'navy ballast-iron' of that description which has been offered for sale. As yet the merits of this iron have not been accurately ascertained, but it is considered suitable for strong forge pig-iron purposes. We have made arrangements to give it a fair trial."

TIN MINERS' ASSOCIATION.—At a meeting of mine agents and others, convened by Capt. William Teague, of Tincroft, and held at Camborne, on March 19, the desirability was discussed of forming an association, having for its object the collecting and recording of information relating to the production of tin, and to the various markets for the sale of that metal, both home and foreign, and the protection and advancement of the tin mining interest of Cornwall and Devon. The meeting was adjourned for a fortnight.

NORTH WHEAL CHIVERTON SILVER-LEAD.—In consequence of the good discovery of silver-lead ore in the 80, and the indications similar to West Chiverton, the applications have already been considerable, and it is expected the share list will shortly be closed. The shares on the market during the week have been in demand at 4¼ to 4¾.

Contract for Pig-Iron.

CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give notice that, on TUESDAY, the 16th April next, at Two o'clock, they will be READY to TREAT with such persons as may be willing to CONTRACT for SUPPLYING and DELIVERING into store at Her Majesty's several Dockyards, EIGHT HUNDRED TONS of SOFT MELTING PIG-IRON, according to a distribution, which, with a form of the tender and conditions of contract, may be seen in the lobby of the Storekeeper-General's Department, Admiralty, Somerset House. No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Pig-Iron," and must also be delivered at the Department of the Storekeeper-General, Admiralty, Somerset House, accompanied by a letter signed by two responsible persons, engaging to become bound with the person tendering in the sum of £25 per cent. on the value for the due performance of the contract.

By order, ANTONIO BRADY,
Registrar of Contracts and Public Securities.
Contract Department, Admiralty, Somerset House, 28th March, 1867.

TO COAL OWNERS AND OTHERS.

THE LONDON PATENT COAL COMPANY are now GRANTING LICENSES for the USE of their PATENT for the UTILIZATION of COAL DUST. All communications to be addressed to the Managing Director, 26, Martin's-lane, Cannon-street, E.C.

COLLIERY IN NORTH WALES.—THREE GENTLEMEN REQUIRE TWO OTHERS to JOIN THEM in DEVELOPING a valuable COLLIERY in NORTH WALES. Capital required about £5000 each.—Address, "A. B.," care of Mr. Leigh, 30, Brown-street, Manchester.

TO COLLIERY MANAGERS.—WANTED, by a Young Man, who has just completed his term of apprenticeship at a large colliery in the county of Durham, a SITUATION as ASSISTANT VIEWER, or to KEEP UP PLANS, &c. Salary not so much an object as employment. Good references.—Address, "T. D. K.," MINING JOURNAL Office, 26, Fleet-street, E.C.

WANTED,—A RE-ENGAGEMENT as COLLIERY MANAGER. Many years' experience and first-class testimonials. No objection to go abroad.—Apply to "H. M.," MINING JOURNAL office, 26, Fleet-street, London.

WANTED, an ASSISTANT MANAGER for the BARROW IRON AND STEEL WORKS. He must thoroughly understand blast-furnaces, engines, rolling-mill machinery, &c.—Address, the BARROW HEMATITE STEEL COMPANY, Barrow-in-Furness, Lancashire.

TO IRON, COPPER, RAILWAY COMPANIES, &c.—A GENTLEMAN of good position, with eighteen years' experience in London (as a principal) in the Iron and Metal Trade, DESIRES to CONNECT HIMSELF with a first-class IRON, COPPER, or other COMPANY in LONDON, where his special knowledge could be made available. The highest references and security can be given.—Address, with full particulars, to "M. H.," care of Robert Wiltshire, Esq., Solicitor, 9, Cloak-lane, Cannon-street, E.C.

TO GOLD MINING COMPANIES, AND OTHERS.—The ADVERTISER, who has had considerable experience as a Mining Engineer, and is thoroughly acquainted with the extraction of gold from quartz, &c., WISHES a RE-ENGAGEMENT TO GO ABROAD, to ERECT, or SUPERINTEND, GOLD REDUCTION WORKS, or to TAKE THE GENERAL MANAGEMENT OF GOLD MINES. Good references will be given.—Apply to "M. E.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

A GENTLEMAN, aged 40, of considerable experience, having had a good Mining and Engineering Education, and accustomed to the Management of Mines, &c., WISHES a RE-ENGAGEMENT as MANAGER to a COMPANY about to OPEN OUT NEW MINES, either in SCOTLAND or IRELAND. First-class references can be given. No objection to going abroad. Address, "P. Q.," care of Lee and Nightingale, Advertising Agents, Liverpool.

A GENTLEMAN having an extensive connection with merchants, manufacturers, and others, would be GLAD to UNDERTAKE the SALE of PATENTED ARTICLES or INVENTIONS, upon commission.—Apply to Mr. W. T. RAWLE, patent and mining agent, 8, Small-street, Bristol.

COMMISSION AGENCY.—A GENTLEMAN, residing in the Iron and Coal Districts of Glamorganshire, is OPEN to ACCEPT COMMISSIONS for the SALE of any ARTICLES used in IRONWORKS and COLLIERIES. First-class references, and good connection.—Address, "Ferrum," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

WANTED,—A SECOND-HAND STEAM ENGINE and BOILER, about four or six-horse power.—Apply, stating price and particulars, to HUMPHREYS and Co. (Limited), Enamelled Slate Works, Carnarvon.

WANTED,—REGULAR SUPPLIES OF FLUOR SPAR, fit for smelting purposes, delivered at any convenient port for shipping. Address, in first instance, "F. L. S.," Post Office, Swansea.

TO COLLIERY OWNERS AND OTHERS.—ON SALE, A FLAT IRON ROPE, flanged pulley, 14 ft. 2 in. diameter, by 6½ in. broad, with 42 1¼ in. round wrought-iron arms, and wrought axle 6½ in. diameter, suitable for 5 in. journals. Quite new. To be seen at the Rotherham, Masbro', and Holmes Coal Company, Rotherham.
Apply, JAMES NELSON and SON, Engineers, &c., Wakefield.

CLIFFORD AMALGAMATED.—WANTED TO EXCHANGE, a large number of the above for SHARES in CHIVERTON, CHIVERTON MOOR, NORTH ROSKEAR, and EAST LOVELL.—Address, "Y. D.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

LLANFAIR GREEN AND BLUE SLATE QUARRY COMPANY (LIMITED).—Manager, T. HARVEY, Esq.—TO BE SOLD, FORTY SHARES, at £1 per share. No calls.—Address, "A. B.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

FINEST HEMATITE IRON ORE.—FOR SALE, a MINE, containing a very large lode, which can be worked for years without machinery. Moderate dues, and very easy carriage to port. The last sale of ore made 20s. per ton.—Apply to Capt. HITCHENS, St. Teath, Camelford, Cornwall.

FOR SALE,—FOUR NEW WROUGHT-IRON TUBULAR LEGS, 54 ft. long, 84 in. square at base, and 10 in. square at top, weighing about 2 tons each.—For further particulars, apply to the BIRTLEY IRON COMPANY, Chester-le-street.

NORTH WHEAL CHIVERTON.—AN IMMEDIATE APPLICATION to MR. J. BATTERS, 13, THROGMORTON STREET, LONDON, E.C., will SECURE a FEW SHARES in this VALUABLE PROPERTY. Prospectuses, &c., forwarded on application.

THE HEIDBERG LEAD AND COPPER MINE, situated one mile from the WILDBERG MINE, on the borders of WESTPHALIA, is ON SALE.—Particulars may be obtained from the agent, Mr. E. KLAPPERT, through letters addressed to Mr. H. K. KLAPPERT, Haverford West.

SULPHATE OF BARYTES FOR SALE,—F.O.B. trucks or vessel, at Carmarthen, at a low price.
Address, A. WATERS, Carmarthen.

ANGLO-MEXICAN MINT OFFICE.—Notice is hereby given, that the ANNUAL GENERAL MEETING of shareholders in this company will be HELD at the office, as under, on TUESDAY, the 2d day of April next, when one director will be elected in the place of George Curnow Hockin, Esq., who goes out by rotation, but is eligible for re-election, and will be proposed accordingly. The chair will be taken at One o'clock precisely. ALFRED GODFREY, Sec.
4, Finsbury-place South, March 22, 1867.

NOUVELLE MONTAGNE COMPANY.—The shareholders are hereby informed that the ANNUAL GENERAL MEETING will be HELD at the Hotel d'Angleterre, Liége, on MONDAY, the 8th April next, at One o'clock P.M. N. BOUHY, Le Directeur Général de la Société.
Engis, the 25th February, 1867.

MR. T. L. COTTINGHAM,
MINING ENGINEER, VIEWER, AND AGENT.
COLLIERIES, MINES, QUARRIES, AND MINERAL PROPERTIES INSPECTED, SURVEYED, VALUED, REPORTED ON, AND MANAGED.
BORINGS, &c., CONDUCTED.
OFFICES,—No. 4, WREXHAM STREET, MOLD.

Agent for the National Steam Boiler Insurance Company (Limited).
Leases of several good Coal, Lead, and Slate Properties for sale.

JOHN HOCKING AND SON, ENGINEERS, REDRUTH, CALL the ATTENTION of COLLIERY PROPRIETORS and others to the present favourable opportunities for the purchase of secondhand CORNISH PUMPING ENGINES and BOILERS at cheap rates. Plans, valuations, removal, &c., of every description of mining machinery undertaken.
FOR SALE, ONE 36 in. PUMPING ENGINE, also an excellent CRUSHER.

WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C., DEALS in ALL KINDS of *bona fide* STOCKS and SHARES, and BRITISH and FOREIGN MINES, either for cash or the fortnightly settlement at close prices.
Recommends the purchase of Don Pedro North del Rey, Anglo-Brazilian, East Caradon, South Crofty, West Frances, West Tolgus, East Gunnislake, Chiverton Moor, Camborne Vean, Emily Henrietta, and Westminster.
Bankers: Alliance Bank,

NOTICE.—CAPT. S. M. RIDGE, of LLANIDLOES, MONTGOMERYSHIRE (late manager of the Brynpastig and Cwm Fron Mines, and others, in Shropshire and Wales), is NOW OPEN to INSPECT and faithfully REPORT UPON ANY LEAD MINE in either of these localities that may be confided to his care, having had better than 30 years' experience in lead mining, as miner and agent.—Address, Capt. S. M. RIDGE, Llanidloes, Montgomeryshire.

SLATE QUARRY REPORTS.—JOHN BOWER, D.C.L. Oxon, Barrister-at-law, who has been for nine years Manager and Director of the Snowdon Slate Quarries Company (Limited), is PREPARED to INSPECT and REPORT on any QUARRY or SLATE VEIN in NORTH WALES, and his REPORT would include every fact FAVOURABLE or UNFAVOURABLE.
Address, Glydir View, Llanberis.

BRITISH, COLONIAL, AND FOREIGN PATENTS, REGISTRATION OF DESIGNS, COPYRIGHTS, TECHNICAL TRANSLATIONS, DRAWINGS, &c.
MR. MICHAEL HENRY,
Memb. Soc. Arts, Assoc. Soc. Engineers, Author of the "Inventors' Almanac," and the "Defence of the Present Patent Law,"
PATENT REGISTRATION AND COPYRIGHT AGENT AND ADVISER.
Inventors advised in relation to Patents and Inventive and Industrial Matters. Printed information sent free by post. Specifications drawn and revised. Searches conducted. Abstracts, Cases, and Opinions drawn.
Translations of Catalogues, Trade Notices, and Circulars for the approaching Paris Exhibition. Mr. HENRY has had especial experience in technical French, and in French Manufacturing and Commercial Matters.
Offices, 6S, Fleet-street, E.C., London, corner of and entrance in Whitefriars-street.

LEAD ORES.

Date.	Mines.	Tons.	Amount.	Purchasers.
March 22	Great Laxey	100	£22 11 6	Walker, Parker, & Co.
	Cargoll	62	16 10 6	Treffry's Executors.
25	East Logylas	70	12 7 0	Panther Lead Co.
	Glogfach	55	16 11 6	A. Eyton.
	Cwmystwith	70	12 8 6	Walker, Parker, & Co.
26	Rose and Chiverton	21	10 17 6	Treffry's Executors.
27	Dylife	59	13 0 6	Walker, Parker, & Co.
	ditto	56	12 18 6	ditto
28	Wheal Mary Ann	54	24 2 6	Stock and Co.
	ditto	24	13 11 6	Treffry's Executors.

BLENDE.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
March 22	Cargoll	37	£ 5 0 6	Vivian and Sons.
	ditto	63	1 14 0	ditto
	ditto	20	1 14 0	ditto
23	Great Laxey	100	4 0 0	David Swan, Jun.
28	Trelogan	100	4 4 6	Bagillt Smelting Co.

BLACK TIN.

Date.	Mines.	Ts. c. q. lbs.	Price p. ton.	Amount.	Purchasers.
March 20	Pedn-an-drea..	8 12 2 16	—	£ 469 3 1	Carvedras.

COPPER ORES.

Sampled March 13, and sold at Tabb's Hotel, Redruth, March 28.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
South Caradon	85	£5 19 0	North Treskerby	54	£4 4 0
ditto	78	4 18 6	ditto	50	5 7 6
ditto	75	8 5 0	ditto	45	4 7 0
ditto	68	7 9 6	Phœnix Mines	77	3 6 6
ditto	65	7 2 6	ditto	76	3 17 6
ditto	56	14 15 6	ditto	23	7 4 0
ditto	37	13 13 0	ditto	19	3 10 6
ditto	27	15 12 6	Craddock Moor	70	5 4 0
Clifford Amalgamated	98	2 0 0	ditto	55	5 4 0
ditto	91	2 15 0	ditto	18	2 4 6
ditto	58	4 12 6	West Caradon	56	4 8 6
ditto	56	4 11 0	ditto	50	5 8 0
ditto	44	3 12 0	ditto	25	0 17 0
ditto	41	5 17 6	ditto	9	2 19 6
ditto	23	3 15 6	Wheal Polharmon	42	3 14 0
Wheal Rose	68	7 9 6	Great Wheal Busy	26	1 2 6
ditto	66	7 9 0	ditto	15	2 2 6
ditto	57	3 11 6	St. Day United	20	3 14 6
ditto	55	3 19 6	ditto	19	2 18 0
ditto	40	3 18 0	ditto	1	6 1 6
ditto	36	3 5 6	Old Wheal Basset	12	1 1 0
ditto	28	2 7 0	ditto	11	1 3 0
North Treskerby	58	4 17 0	ditto	8	1 0 0
ditto	57	4 12 6	ditto	7	0 16 6
ditto	56	4 0 0	Cargoll	35	11 14 6

TOTAL PRODUCE.

South Caradon	491	£4234 8 0	West Caradon	140	£ 565 16 6
Clifford Amalga..	411	1455 8 0	Wh. Polharmon..	42	155 8 0
Wheal Rose	350	1762 2 0	Great Wh. Busy..	41	61 2 6
North Treskerby..	320	1460 4 6	St. Day United ..	40	135 13 6
Phœnix Mines	195	783 2 0	Old Wheal Basset	38	39 0 6
Craddock Moor	143	690 1 0	Cargoll	35	410 7 6

Average Standard ..... £103 19 0 | Average Produce 7⅞
Average Price per ton £5 4 6
Quantity of Ore ..... 2246 tons | Quantity of Fine Copper, 172 tons 10 cwts.
Amount of Money £11,752 14 0

LAST SALE.—Average Standard ..... £114 11 0.—Average Produce 6¼
Standard of corresponding sale last month, £108 15 0.—Produce, 7¼.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons	191½	£1851 10 3
Freeman and Co.	194½	877 19 6
Grenfell and Sons	247½	1499 2 0
Sims, Willyams, and Co.	255½	1329 13 3
Williams, Foster, and Co.	357½	1881 12 6
Mason and Elkington	174	657 4 0
Bankart and Sons	190	1507 19 0
Copper Miners' Company	413	1660 14 3
Charles Lambert	163	376 13 0
Sweetland, Tuttle, & Co.	59½	110 6 3
Total	2246	£11,752 14 0

Copper ores for sale at Tyack's Hotel, Camborne, on Thursday next.—Mines and Parcels.—Wheal Seton 783—West Seton 522—Clifford Amalgamated 441—West Tolgus 362—South Crofty 342—East Pool 145—Wheal Basset 136—Carn Camborne 130—Dolcoath 59—East Basset 46—Tresavean 37—Tincroft 32.—Total, 3035 tons.

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday week.—Mines and Parcels.—Prosper United 403—Carn Brea 275—East Carn Brea 219—Par Consols 145—Crenver and Abraham 145—Rosewarne United 118—Botallack 94—South Dolcoath 58—Mellanear 35—Great South Tolgus 28—Rosewarne Consols 27—Pendeen Consols 18—Bugle hole's Ore 13—Stray Park 8,—Total, 1586 tons.

WATSON AND CUELL'S MINING CIRCULAR

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MESSRS. WATSON AND CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon mines and mining, and the state of the share market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON and CUELL have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON and CUELL they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are also daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

WEST PRINCE OF WALES—"X. X."—Although in a large number of shares, they will be well held. We have heard of the advice named, as we also heard of the advice of the same parties to sell Prince of Wales at 5s., and we wonder what those who acted upon it think now! There is no reason why West Prince should not turn out equally good, and we and others are satisfied to take a large interest and hold it.

"M. A."—We have not yet got all the information necessary.

"X. Y. Z."—If our correspondent turns to a map of the district he will find the elvan course which made all the ore in Holmbush runs through Prince of Wales, from one corner of the mine to the other, and it underlies south into the sett. It also passes through West Prince of Wales. The richest mines in Cornwall have all made their returns in connection with elvan courses.

"A BONA FIDE HOLDER" is quite right to rely solely upon the agent's reports; and the fact, that in the face of adverse statements, shares continue to rise, shows the estimation in which the public hold the authors of them. An agent, whose report was published last week as a "special," says—"The next sampling will, probably, realise about 1000*l.*, at a cost of 800*l.*, showing a profit of 200*l.* on the two months." This is about as true as other parts of his report. The last sampling was on February 8, so that the present sampling is for seven weeks, and not two months. Last sale was estimated by the agent at 700*l.*, it produced 800*l.*; and if the present sampling brings the same price—8*l.* per ton (1200*l.*)—the profit will be 500*l.* at least, while the present rate of raising is equal to 500*l.* per month profit. In reference to the machinery, the engine is capable of taking the mine down nearly 100 fms., so that in a year or two it will be time enough to think of a larger one. The monthly cost is *under* 300*l.*, including merchants' bills. The royalty is 1-18th.

NORTH WHEAL CHIVERTON SILVER-LEAD MINE.

In 3000 shares.
On the Cost-Book System.
A Committee of Management will be chosen at the first meeting of shareholders.

BANKERS.
The Alliance Bank (Limited), London.

LONDON MANAGER.
GEORGE NOAKES, Esq., F.G.S., No. 181, Gresham House, Old Broad-street, London, E.C.

LOCAL AGENT.
Captain William Hancock.

SOLICITOR.
Tufnell Southgate, Esq., 7, King's Bench Walk, Temple, London, E.C.

BROKERS.
Messrs. Staples and Bretherton, 4, Royal Exchange Avenue, London, E.C.

PROSPECTUS.

This mine is situated in the best and most productive lead mining district in Cornwall, and is a little to the north of the justly celebrated West Chiverton Mine.

West Chiverton may be termed the richest and most profitable silver-lead mine in Cornwall, and is now paying dividends to the fortunate shareholders at the rate of £20,000 to £25,000 per annum (or £7 to £8 per share).

West Chiverton was sold about April, 1863, to some three gentlemen, for the sum, it is stated, of £30,000 (or at the rate of £10 per share), and was afterwards divided into 3000 shares. It is now selling at £60 to £62 per share, or (say) £180,000 to £185,000, and at one time (since 1863) attained the high figure of £85 to £90 per share, or upwards of £250,000 to £260,000 for the mine.

From the time of the purchase, about April, 1863, at the rate of £10 per share, the mine quickly and greatly improved, for in October—only some six months after the purchase—a dividend of 15s. per share, or 2250*l.*, was paid to the shareholders; and at the end of December, in the same year (1863), the shares had risen to £54, £55 each, or £162,000 to £165,000, for that which had been purchased only some eight months previously for about £30,000. Since this period the mine has gradually and wonderfully improved as depth has been attained—*i.e.*, the 80 fm. level (same level as North Wheal Chiverton is now at) down to their present rich part, the 100 fm. level. At the 80, in West Chiverton, a rich lode was cut into, worth from £50 to £70 per fm. It may be well also to state that, in addition to the great outlay made in machinery, &c., on West Chiverton (out of profits), since 1863, the total amount paid in dividends up to the present time is stated to be £17 7s. 6d. per share (or £52,125), which, with the balance to the credit of the company, is more than double the amount paid for the purchase of the property only some four years ago; and, as before stated, the market value of the mine is now £60 to £62 per share, or £180,000 to £185,000, with every probability of increasing the quarterly dividends to £3 per share, or £36,000 per annum.

East Wheal Rose and the Old Shepherds Silver-Lead Mines (alluded to in the agents' reports), on a comparatively small outlay, are said to have realised the enormous profits of about £300,000 to £400,000; and the shares in the former mine (East Wheal Rose) advanced from about £50 to £1000 and £1200 per share. As will be seen by the reports, the opinion is that "the lodes which proved so productive in Old Shepherds Mine are the same lodes worked on in North Wheal Chiverton."

There are several well-known productive lodes in North Wheal Chiverton, from which considerable quantities of lead and blende have been raised and sold, and this only from a comparatively shallow depth, giving indications, bordering almost on a certainty, of great productiveness by a deeper development, and driving of the present 80 fathom level, the strata being identical with that of West Chiverton and neighbouring productive mines.

Lead and blende ores are now being raised, and as the development of the mine progresses the returns of ores will be greatly increased. It will be observed by the report of Captain Nancarrow (of West Chiverton Mine), that in alluding to the 80 (or bottom) level, he says it is cleared for some 50 fathoms in length, and that the lode is some 6 feet wide, showing a decided improvement, as compared with the shallower levels, and for the entire length is of a masterly and promising character, and that many fathoms of lead ground in the back of this level (the 80) may be taken away at a profit to the company.

From the testimony of every practical agent who has inspected North Wheal Chiverton, it is inferred that, as depth is gradually attained, by sinking the shafts, and the driving of levels in new and unexplored ground, the lodes will prove highly productive for mineral, and that a rich and profitable mine will quickly be laid open.

The steam pumping-engine, machinery, pitwork, and dressing-floors, together with the work already done in and on the mine by previous adventurers, must have cost about £25,000 to £30,000 (or say about £10 per share—per 3000th), the whole of which is in good working order, and operations at the mine are now being actively carried on.

There are several shafts sunk, which has been the work of several years. The old shaft is down to the depth of 80 fms. from surface, and this is the greatest depth that has yet been attained. It is supposed to be about the same depth (taking the geological position of the two mines) at which West Chiverton became so productive and highly profitable.

The steam pumping-engine is a 50-in. cylinder (a new one about three years ago), and is capable of pumping the water to a very great depth.

From its proximity to West Chiverton, now selling at £60 per share, or £180,000; Chiverton Mine, selling at about £8 per share, or £24,000; Chiverton Moor, selling at about £8½ per share, or £25,500; and Great Retallack, selling at about £3½ to £4 per share, or £17,000 to £18,000, and having similarly favourable conditions for the production of large quantities of lead and blende ore, it is only reasonable to expect that North Wheal Chiverton will prove equally as productive as the other mines in this district when properly developed. Indeed, there is scarcely a doubt that discoveries of no ordinary importance will be met with, and that at no very distant period.

The last company was, as is well known, carried on under many and great disadvantages, and was obliged to suspend operations just at a time when, as it would appear, they were about to meet with great success.

With a view of vigorously, and at the same time economically, prosecuting operations, the adventure has been reconstituted by the present proprietors, on the Cost-book System, in 3000 shares (same number as the above-named Chivertons), upon which a call of £4 per share has been made; which sum, after paying the present proprietors for the engine, machinery, pitwork, dressing-floors, and all expenses incidental thereto, including all the costs and liabilities up to the end of March, 1867, will leave the sum of £5000 to the credit of the company, which sum, with the large development above described, competent mining authorities consider sufficient to place it in a profitable position.

The present proprietors, having already received applications for a number of shares, have determined to receive applications from the public for a limited portion only of the remainder, at £4 per share, £2 per share to be paid as deposit on application, and the remaining £2 on allotment, and if no allotment is made the deposit will be returned without deduction.

Priority will be given to the earliest applicants for shares.

The reports on the mine (and extracts of reports), by the best practical mining authorities in Cornwall (including the managers of West Chiverton, Chiverton Moor, and Chiverton Mine, and likewise the manager of Great Laxey Mines, &c.), show that highly remunerative results may be confidently looked for (at an early period) from prosecuting the operations with vigour.

A Committee of Management will be elected at a meeting of shareholders, to be held within one month after the closing of the share list.

Applications for shares, in the form appended, accompanied with the deposit, may be made either to the Alliance Bank, London, Liverpool, and Manchester; or to the brokers, Messrs. STAPLES and BRETHERTON; or to GEORGE NOAKES, Esq. (the London manager).

FORM OF APPLICATION FOR SHARES.

To the proprietors of North Wheal Chiverton Silver-Lead Mine.

GENTLEMEN,—Having paid to your bankers the sum of £ , being the deposit of £2 per share on shares in the above mine, I hereby request you will allot me that number, and I hereby agree to accept such shares (or any less number you may allot to me), and to pay the remaining sum of £2 per share on allotment.

Usual signature .....
Name in full .....
Residence .....
Date ..... Profession or business.....

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt: it then forms an accumulating useful work of reference.

CHONTALES GOLD AND SILVER MINING COMPANY.—Can any of your correspondents inform me why not more than 270 ozs. of gold were remitted last month as mentioned in your report from the Chontales Gold Company? This only makes some 900 ozs. sent since last March, and Capt. Paul, in his report in your Journal of last July, said that he could easily send home 8000 ozs. before the beginning of March. If so, why not have fulfilled his promise, and where is it? And in the same report he states that a portion of the machinery was up and all would be completed in three months; now, in last week's Journal it is stated that it is *expected* efficient machinery will be erected by the "next wet season (or July). How is this; and what has Capt. Paul been doing at this time, and in what has the paid-up capital been spent? Perhaps you can inform me where all the machinery is that was sent out? It is but reasonable that the shareholders should have some information respecting these and other matters of interest, for the commissioners sent out do not appear, "from the numerous reports," to satisfy the minds of the shareholders about the workings at the mines.—INQUIRER.

["Inquirer" and other correspondents should apply at the office of the company, where information is, doubtless, obtainable by every shareholder. It is true that Capt. Paul appears to have been incautious in his reports, though he may have had as good faith in his statements as many hundreds of persons who have made promises and engagements which (owing to a change of circumstances) were not fulfilled. It is possible, too, that Capt. Paul may have had many unforseen hindrances to prevent his doing all that he expected within the period he anticipated. It is stated that a large portion of the machinery, overtaken in transit by the wet season of last year before it could be got on the mines, would be immovable for six or eight months, until the ground, in March and April of this year, would be sufficiently hard to transport it; hence the delay. In all probability this is now in active operation, and possibly a portion of it may be erected by July, which, with that which has been in course of construction during the last six months, gives every reasonable prospect of efficient machinery being available to make regular returns of gold after July next, when water-power will be ample. Until then little or no returns are expected.]

MINERAL RIGHTS ASSOCIATION.—Notwithstanding the remarks of your correspondent in last week's Journal as to the business having "commenced long ago, and that the directors are at present in negotiation relative to an important property," &c., I can state that the property referred to has been so for under consideration that the offer has been withdrawn, and the same acquired by other parties. As a shareholder, my views generally coincide with many of your correspondents.—A. W.

PRINCE OF WALES.—Are the north and south lodes 12 or 22 fms. apart at the shaft? At the last meeting they were stated to be 12 fms.; a correspondent in last week's Journal said they were 22 fms.—which is correct?—SUBSCRIBER.

PRACTICAL MINING LITERATURE.—A new edition of Elderhorst's "Blowpipe Analysis and Determinative Mineralogy" is in the press; it is revised by Prof. C. F. Chandler, professor of Analytical and Applied Chemistry in the School of Mines of Columbia College, New York.

Received,—"Enquirer"—"An Adventurer in Mines"—"A Big-Premium Shareholder"

THE SLATE TRADE.—Pressure on our space compels us to postpone the letters of "Snowdon," Mr. Thomas Harvey, and "Observer."

*** With last week's Journal we gave a SUPPLEMENTAL SHEET, which is published—Prof. Warington Smyth's Lectures at the Royal School of Mines; on the Duration of our Coal Fields; Mr. E. W. Binney, F.R.S.; Lists of Blast-Furnaces in South Staffordshire and East Worcestershire, and in Scotland; the Cannon King—Krupp; the Great North Laxey Mining Company; Improved Inventions; Mineral Wealth of the Pacific, &c.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, MARCH 30, 1867.

No one possessing any acquaintance with the condition of our Metalliferous Mines and Collieries can have read the report of the recent debate in the House of Commons, without regretting that the members of that House should attempt to legislate on any matter of which they are obviously ignorant. This is so apparent, especially in the remarks of Mr. CLIVE and of Mr. KINNAIRD, that we cannot but feel surprise that any men should presume to offer even suggestions on matters connected with a great and important industry knowing so little of the conditions involved. Mr. CLIVE, for example, concludes, from having read a section here and there in the Report of Lord KINNAIRD'S Commission—and even these carelessly—that all our metalliferous mines have a temperature of nearly 100° Fahr. The fact being that this temperature is not reached in half a dozen of the deepest mines in England. He says, again—"The men, from the heat, were kept in a state of constant exhaustion," which Mr. CLIVE might have learnt was not correct, if he had enquired of the miners themselves. There are several causes at work producing the low state of vitality which, it is readily admitted, prevails in some of our mining districts, but such a temperature as that quoted is not one of them. Mr. CLIVE concludes his remarks by saying that "better ventilation was most desirable, and could very easily be introduced." It is by no means clear whether this refers to coal or metal mines, for there is a curious confusion in the speech, as reported in the *Times*, leading anyone to believe that the honourable member supposed the conditions to be identical. Mr. KINNAIRD, following Mr. CLIVE, says—"The present system of ventilation could kept up a current of air, *but what was needed was a second shaft, not as was in use in coal mines, to change the air completely.*"

If our coal mines had as many shafts, or even half the number of shafts, as we find in the metal mines of Devon and Cornwall, we should not be shocked, as we are from time to time, with the disastrous loss of life arising from the explosion of fire-damp. The remarks given in the way of suggestions—on the use of copper tamping-rods, "copper being confessedly not liable to explode," and of the clothing of the "iron ladders with a slip of lead or copper, like a sandwich"—would simply excite a smile, did they not bear melancholy evidence of the dangers attendant on the attempt to legislate on any subject with such imperfect knowledge. An equal display of ignorance was shown in the remarks on the collieries, and in the remedial measures proposed. That the best possible intentions have urged the honourable members to bring the question of Mines Legislation before the House of Commons we most freely grant. We believe they have been actuated by the most earnest desire to do good, but we hope they will not attempt to meddle with our mines or miners until they have taught themselves to avoid the curious errors into which they have fallen. Although both coal and copper mines are mixed together in the speeches on which we have felt compelled to offer some remarks, we shall confine ourselves to the metal mines which are more immediately the subject intended to be brought under consideration, as is shown by calling distinct attention to the Report of the Metal Mines Commission.

That our modes of working our mines, whether for tin, copper, or lead, are defective in many respects we have again and again shown. That our metal miners perish in their prime has often been the subject of our deep regrets. We have urged in the strongest language the necessity of adopting such measures as would relieve the miner from many of the causes which operate to his destruction; therefore when we recommend the postponement of the consideration of the questions involved, we shall not be suspected of a desire to obstruct any improvements.

We will admit, at once, waiving for the present all argument, that the existing conditions of things in our mines are not such as reflecting minds would desire, and that they can be easily improved. These are positions maintained by the speakers in the House of Commons. This admitted, it will also be admitted that the mines cannot be improved without a considerable expenditure of money. To improve the ventilation, and to alter the methods of descent to, and of ascent from, the depths, shafts must be cut down, and levels enlarged. Even the introduction of copper tamping-rods in the place of iron ones would lead to a great expenditure; indeed, no single improvement could be introduced without a large outlay.

More than 300 mines are now at work in Devonshire and Cornwall, and out of these there are not 20 which are, at the present time, making any profit. Considerably more than one-half of the tin and copper mines are working at a loss. There are but few mines from which men have not been discharged; and in some of the most

portant districts the shareholders are nobly meeting large losses monthly, rather than increase the misery and want which now cloud them. From 4000 to 5000 miners have left the mining districts of Western England, and, unless the Metal Market puts on a more cheerful aspect, many mines must soon suspend operations, and the miners must seek bread in other lands.

The British Metal Mines are now struggling to live under such a state of depression as we have never previously experienced. The slightest additional burden put upon them, they must be for the most part abandoned, and the land covered with want, wasted women and children, the fathers, where they are enabled to do so, betaking themselves to other districts or countries where there may be some demand for the kind of labour to which they have been accustomed.

Mr. WALPOLE stated that he would "see whether some measure could not be passed before the end of the session." Let us entreat him to see, first, whether this is a fitting time to throw any check upon the efforts which are being made to sustain our mining operations. If the HOME SECRETARY will cause independent enquiries to be made, we are certain the results which he will obtain will induce him to reconsider his promise to the House of Commons.

COLLIERY AND METALLIFEROUS MINES INSPECTION.

[FROM A CORRESPONDENT.]

We are told that there was once an old Scotch lady, who was so humane that she would not allow her carpet to be beaten, who went into hysterics when she heard a boy who was listening to a story about a donkey tell the narrator to cut his tale short, and fainted away because a relation told her he had been killing time; and there certainly seems to be a similar superabundance of humanity amongst the representatives of Lord KINNAIRD in the House of Commons, who are now displaying so much anxiety to create unwarrantable alarm concerning the dangers to which miners are exposed, and to thrust upon those engaged in the working of mines and collieries an amount of unnecessary supervision, which in connection with other trades would never be attempted. The cause of the feeling, however is apparent—those who would banish accidents from mines give as data statements which are not true, and base their arguments upon these false data.

Placing assertion and fact side by side, the variation will be at once seen. Lord ELCHO countenances the statement that one Inspector has 900 mines under his inspection, which is simply untrue. Had he taken the HOME SECRETARY as his authority, instead of the bare assertion of the deputation that waited on that gentleman, he could have ascertained that no Inspector has more than 500 (the actual number is much lower) under his inspection. Lord ELCHO asserts, on the authority of Mr. MATTHEWS, that the Oaks Colliery has but two shafts, an upcast and a downcast, close together. This is also untrue. The Oaks Colliery has three shafts, two downcasts close to each other, and an upcast at a considerable distance from them. Mr. KINNAIRD asserts that the miners are subjected to evils that could be removed with little trouble. An isolated case may occur in which an accident may result from reckless management, but very few instances could be found in which any suggestion calculated to secure increased safety to life and limb is neglected or rejected as unworthy of adoption, if it prove upon practical trial to have anything to recommend it. Mr. KINNAIRD asserts that the terrible calamity at the Oaks Pit would not have occurred had ANSELL'S fire-damp indicator been used, which, if not absolutely untrue, is, to use the mildest term, dangerously inaccurate. In almost every statement made by Mr. CLIVE, by Mr. KINNAIRD, and by Lord ELCHO, not wholly without foundation, there is so much exaggeration that it is calculated to lead to false conclusions; yet it is evident, from the ingenuous manner in which the statements are made, that there was no intention to exaggerate, but that the honourable gentlemen have been themselves misled by those who have pretended to furnish them with facts.

The feeling of the coalowners generally towards Mr. ANSELL'S fire-damp indicator was well reflected by Mr. LIDDELL when he said that there was no indisposition on the part of coalowners to adopt it, but that the instrument was a most delicate and complicated piece of machinery, and it was exceedingly doubtful whether it was adapted for the ordinary wear and tear of coal mines. It is ev dent that in his endeavour to do Mr. ANSELL excessive service Mr. KINNAIRD has done him a positive injustice, by claiming for his indicator powers which even its inventor does not claim for it. Thus Mr. KINNAIRD states that the instrument will register the state of the atmosphere in a mine, which is not the fact. It will sometimes indicate that sufficient gas has been present to cause danger, but it is precisely of the value of a thermometer tube containing the registering needle for maximum temperature without the mercury or its equivalent to place the needle in position. Twelve months ago Mr. ANSELL had never been in a colliery in his life; and since he has seen the interior of a mine he has discovered the undesirability of relying upon any one of his indicators, and consequently proposes to use two distinct instruments side by side; and, as if to confirm by anticipation Mr. LIDDELL'S remarks as to the delicacy of the indicator, he states that these two instruments (one to indicate sudden and the other slow accumulations) are to be placed in pigeon-holes, cast in the iron props used to support the roof. Iron props are only exceptionally used in coal mines, and those suited for the reception of Mr. ANSELL'S indicator would be of considerably less strength, weight for weight of material, than props unweakened by pigeon-holes. In no instance has the name of an engineer or other person practically connected with collieries been published as certifying the practical value of the instrument, two classes of persons only being advocates of its adoption—those who are unacquainted with mines, and those who have not seen or examined the indicator.

To turn to metalliferous mines, Mr. KINNAIRD complains that the miners engaged in them suffer through wearing damp clothes, sudden alternations of temperature, climbing ladders, and so on; and as the noble Chairman of the recent Commission (Lord KINNAIRD) actually went through the ordeal of descending a mine, he has been enabled to create the same feeling of combined terror and pity in the minds of his friends as his first visit to a mine instilled into his own. The dangers of metalliferous miners are infinitely fewer than those to which the workmen in most other trades are exposed, as may readily be proved by a reference to the number of deaths per annum per 1000 workmen employed, yet it is thought to impose an amount of interference upon the miner, from which all others are exempt. A Bill will, no doubt, be brought forward during the present session for dealing with both coal and metalliferous mines, but it is to be hoped that whatever may be proposed, the knowledge and experience of those connected with our mining industries will be preferred to the recommendations of those whose pseudo-humanity is their only guide.

MANUFACTURE OF IRON AND STEEL.—An invention, of which the specification will be found in another column of this day's Journal, has been patented by Mr. JOHN CALVERT, of the Strand; it consists essentially of crystallising the graphite, which he states to be present in the cells of iron and steel, or of replacing such graphite by boron. It appears that for nearly 14 years the inventor has been engaged in researches concerning the structure of iron and steel, which have led to the discovery of some important facts, such as the cleansing property of oxygen by the ancient Japanese method of decarbonisation at a high temperature, and his own discovery, in 1853, by bringing the particles of iron in contact with oxygen at a low temperature. At the same time he also put forth his theory of the cellular structure of iron, and showed the presence of carbon in many steels in mechanical division, by the precipitation of graphite from acid solution of various steels. Since that date Mr. CALVERT has devoted much time, and at a great experimental cost has made certain very important scientific discoveries. After having determined the cellular structure of iron in the various stages of collapse in the several conditions of manufacture, he proceeded to investigate the contents of the cell, and in the course of these investigations facts of the highest value have been elicited. He discovered that the harder the substance occupying the cells the stronger the steel, and that, although the hard slags of titanium occupying the cells formed a very ordinary steel, yet there were much more valuable and important substances, which, by giving greater rigidity to the mass, were of the utmost importance in its manufacture. Silicon in a crystallised state made a very fair steel; boron in a crystallised state a still better article; but carbon in its crystallised state (diamond) the strongest and best class that could be produced. During these investigations several thousand samples of steel and iron have been carefully examined, and all found to be more or less choked with soft impurities; much may be, therefore, expected from these discoveries in increasing the value, quality, and strength of iron and steel.

EXPORTS OF RAILWAY IRON.—The year has opened with feeble results as regards the exports of railway iron, only 17,944 tons having been exported in January, as compared with 30,367 tons in January, 1866, and 21,402 tons in January, 1865. The exports declined to British India, Australia, and other parts of the world; and the decline observable in the general total would have been much more marked but for rather considerable shipments made to the United States. Although the demand for our railway iron fell off last year from Sweden, France, Spain, Brazil, Chili, and other countries, there was a large and solid increase in the enquiry from Russia, Prussia, the United States, British America, British India, and Australia. The result was that the total exports of the year footed up to 498,595 tons, as compared with 434,300 tons in 1865, 408,215 tons in 1864, 446,440 tons in 1863, 400,765 tons in 1862, 377,565 tons in 1861, 453,445 tons in 1860, 528,927 tons in 1859, 433,250 tons in 1858, and 457,660 tons in 1857. It cannot be said that this is a branch of the export iron trade which is making much progress. The value of the railway iron exported in 1866 was 4,166,419*l.*, as compared with 3,541,296*l.* in 1865, 3,305,086*l.* in 1864, 3,278,304*l.* in 1863, 2,817,877*l.* in 1862, 2,906,359*l.* in 1861, 3,408,759*l.* in 1860, 4,124,208*l.* in 1859, 3,565,224*l.* in 1858, and 4,000,515*l.* in 1857.

MINERAL STATISTICS OF VICTORIA.—The Mining and Mineral Statistics of Victoria, prepared by Mr. R. BROUGH SMYTH, F.G.S., the Secretary for Mines, contains an interesting account of the condition and productiveness of the gold fields during each of the last 15 years. The average earnings of the quartz miners are represented as lower than the earnings of the alluvial miners, but this is attributed to an increase in the number of the quartz miners. The value of all the gold claims throughout the colony is estimated by the local registrars and surveyors in their reports to the Minister of Mines at 8,498,924*l.* There were 1043 leases in force to the end of 1865, extending over 15,779 acres 1 rood 17 poles, for the working of which it was proposed to employ 3,541,870*l.* The admirable manner in which Mr. Smyth's reports are prepared has been alluded to upon several former occasions, and that now under consideration is fully equal to any of them, and is well calculated to secure for the mining industries of the colony the attention to which they are entitled.

SELECT COMMITTEE ON MINES.

The Select Committee on Mines met on Tuesday at the Palace of Westminster—Present, Mr. NEATE, in the chair; Mr. WOODS, Mr. GREENALL, General DUNNE, Mr. ORME FOSTER, Sir PHILIP EGERTON, Mr. KINNAIRD, Mr. LIDDELL, Mr. HUSSY VIVIAN, Mr. BRUCE.

The first witness was Mr. H. HERRIES CREED, who said that in December last he went over to Belgium to pay a visit of inspection to the coal fields of that country. The mine to which he paid most attention was the Poirier Mine, in the Charlerol district. It is 700 yards deep, and of considerable area. It is not a fiery mine. Women and children work there—there were about 30 of the former, from the ages of 15 to 25. The children were not younger than 10. The seams in that mine are so thin that the workmen cannot stand upright. The descent is made by the shaft, and catch cages, at one lift. The shaft is lined with brick and stone. I was informed by the Government Inspector that generally ventilation is good, and usually effected by extraction or exhaustion, and the fan is used. There is great attention paid to ventilation, and the condition of the air was perfectly breathable, but not quite fresh. I went down a new pit at Wednesbury Oak, belonging to Mr. Williams, the other day, and the ventilation there is better than in the Poirier Mine. The lamp used is the Moeller, a new safety arrangement, in which the flame is protected by three gauze curtains, and extinguishes itself if turned on one side. It gives more light than the Davy lamp. My attention was not drawn so much to the nature and character of the mining operations as to the condition of the workpeople, their appearance, lodging, education, and wages. They are not so well fed or so well housed as in England. The wages earned by the colliers are—holers and hewers, from 2s. 11d. to 4s. 2d. per day; exceptional men, 5s. to 6s.; wood setters, 3s. 1d. to 5s.; wood-cutters or sawyers, 2s. 6d. to 2s. 11d.; loaders of coal, 2s. 6d. to 2s. 11d.; sundries, 1s. 6d. to 2s. 6d. Great efforts are now being made to find both lodgings and cottages for the miners. They work 12 hours a day, with an hour's intermission for dinner. The inspection is under the control of the Minister of Public Works. There are no sub-Inspectors—all are of one grade below the Chief Inspector, who represents the rights of the Government. There is no such thing in Belgium as a freehold tenure of anything below the surface. Everything except the surface soil is by law the property of the State, and all coal and mineral working, therefore, underground is carried on by concessions, or promises of concessions, from the Government, who are empowered to levy on the concessionaires, in consideration of the grant, a tax constituted of two distinct items. One is termed a *redevance fixe*, which is a small tax in the nature of a quit rent, and levied by way of compensation to the owners of the surface for disturbance and occupation of the soil. The other is an impost termed *redevance proportionelle*, which may be described as a royalty, payable to the State as proprietor of the minerals under the surface. This is each year assessed upon the produce of the mine in the preceding year at the rate of 2½ per cent. The first is a very small affair compared with the second. In 1865 the former produced in the Charlerol district only 3439 frs., and the latter 135,899 frs. The inspection of the mines in Belgium is much more real, effective, and constant than in England. The Belgian Inspector is required to go down each mine four times a year, but in practice he goes down much oftener. He devotes, as a rule, two days a week to personal inspection below the surface. The inspection of the English Inspector, on the other hand, is generally indirect, the workmen submitting to him any grievance they may have. It is part of the business of the Inspector to look after the interests of the Government. His instructions are to carry out the objects of the Government by promoting the general industry of the district in which he is placed. He is greatly trusted, both by masters and men; he frequently arbitrates between them, and is consulted by both the one and the other. They have mining colleges at Charlerol and Liége, and the managers have to pass through these, and to undergo an examination. They do not seem much better instructed than mine managers in this country. They are very intelligent men, and they always work in harmony with the Inspectors. The laws affecting mines are very complicated, and appear to direct or control almost every operation. I had some conversation with the workmen during the time I was down the mine, which was about a couple of hours. They appeared well satisfied with their condition, and seem to be a very quiet set of people. There was no trace of immorality or bad language observed amongst the women employed; but the practice of employing them in the pit is gradually going into disuse. The Government Inspectors generally discourage the employment of women whenever they can. I cannot say there are less precautions against accidents than here, but it seems to be easier there to take such precautions than it is here.

By Mr. LIDDELL.—The mines are not rated, and have no charge on them, except the *redevance*. The proprietors, however, have to pay a certain proportion to an insurance fund, to provide for the assistance of the miners in sickness and old age, and for widows and orphans. I did not see any English workmen employed in the Belgian mines.

By Gen. DUNNE.—There is no legal restriction as to ages of children employed, their hours of work, or their education.

By Mr. VIVIAN.—The women never go down to work in the pits after marriage. They are employed in loading the wagons. Their dress is something like a loose bathing-dress. I think the miners in Belgium are a more careful people than ours in England. They do not work with the same energy as our miners.

Mr. VIVIAN: I have heard that the workmen act as a sort of police on themselves, and that if a workman is seen with a naked light, or breaking the other rules, and thus endangering the safety of the mine, his fellow-workmen would stab him? Do you know if there is any such feeling?—WITNESS: I do not know.

By Mr. KINNAIRD.—The Conseils des Prudhommes work well, because in Belgium they deal with individuals, and not with bodies, like the Unions in this country. It may be that the Unions have grown up here on account of the absence of any such body as the Conseils des Prudhommes in this country.

By Mr. WOODS.—The strikes in this country in these days do not, as it appears to me, refer only to questions of wages. The Conseils des Prudhommes deal with questions of breaches of contract; but here strikes appear to have many objects. The men here are not only dissatisfied with their remuneration, but with their social position, and their lack of political power.

Mr. ASHWORTH, of the firm of Ashworth, Smith, and Co., Manchester, exhibited a model of Broadbent's Patent Safety Apparatus for Colliery Cages. He said it had been tried under every possible variety of circumstances, and had never failed. It was coming gradually into general use. An accident happened lately at Mr. Titus Salt's pit, near Bradford, in which the rope having broken, the cage was brought up by this invention, and the lives of two men thereby saved.

Mr. HUSSY VIVIAN said that, in his opinion, it was the only perfect safety-cage, and that he had ordered some of them for his pits.

Mr. WALTER WILLIAMS, jun., owner and manager of a colliery at Wednesbury Oak, near Tipton, said—I went with the previous witness to Belgium, and in most respects agreed with his testimony. He, however, made one or two mistakes. For instance, there is a law in Belgium which has been in force since 1810, forbidding the employment of children under ten years of age in mines; but that is the only restriction as to their employment. The Poirier Mine is 700 yards deep, and they make the descent at one lift. There are some other mines in Belgium as deep as 1200 yards. The ventilation at Poirier is solely conducted by means of a fan, and not by exhaustion. The fan is worked by a 25-horse power engine, and the supply of air is ample. An air-shaft is sunk on one side of the main shaft, but constructed roughly, and without brick or other lining, and the air is forced down that shaft. The dip of the beds is at an angle of 45°, and the methods employed there would not be applicable to the mines in this country, where the beds are almost horizontal. They begin at the lowest depth, and work upwards. The accidents in the Belgian mines, compared with the coal raised, are 50 per cent. less than in the English pits. The deaths from explosions in 1860, 1861, and 1862 were 1·16 per 1000 in England, and 0·50 in Belgium. The seams being perpendicular, there is comparatively but little loss of life by falls of roof, and the men also are more cautious. Those two causes are sufficient to account for so great a difference in the number of deaths by accidents. It is only right to mention that the proportion of fatality to the amount of coal raised is considerably less now than in the three years I have mentioned. The inspection in Belgium is carried on by a considerable staff—an Engineer-in-Chief, an Inspector-General of Mines, three Superintendents of Districts, and under these there are sub-Inspectors. There is a class of pupils from the mining colleges, youths of from 18 to 20 years of age, who visit the mines under charge of the Inspectors for the purpose of learning their business. They were not allowed to interfere or to speak; they merely had permission to go down the pits and to make use of their eyes.

The CHAIRMAN: Mr. Dickinson, in his evidence, says that a great part of the work of inspection is done by these pupils.—WITNESS: It is no part of their duty. I cannot say what is practically the result.

Mr. LIDDELL: Is there any delegation of the Inspector's authority to those pupils?—WITNESS: None whatever; the very reverse is rather the fact. They are there merely to learn; to look, but not to speak.

Mr. LIDDELL: So that they are not to complain of anything they see amiss, or to suggest anything?—WITNESS: Certainly not.

By Mr. GREENALL.—The miners there are as much given to smoking as in England. I do not know what punishment there is for smoking in the pit.

By Mr. WOODS.—The inspectors-in-chief are most of them educated at the colleges, though there are some who have not been. The pupils come from the colleges and occupy about the same position as pupils of viewers in England. The Belgian mine managers, I should think, get, as a rule, a more scientific education than ours.

After some further examination on minor points, on which the witness was not prepared to make definite statements, the committee adjourned.

No day was named for their next meeting.

EXTINCTION OF FIRES IN COAL MINES.

At the Manchester Geological Society monthly meeting, on Tuesday, Mr. THOMAS ATHERTON read a paper reviewing the existing methods of extinguishing fires in coal mines, and suggesting a new one for the consideration of the meeting. Prior to the reading of the paper Mr. DICKINSON, the Government Inspector of Coal Mines, drew the attention of the meeting to certain experiments which had been made at the Hetton Colliery with reference to the testing of safety-lamps. He said that some years ago Mr. Horsfall and himself wanted this society to institute a series of experiments as to the velocity with which it was necessary for the fire-damp to impinge against a Davy lamp to cause an explosion. They were prevented making experiments at the time, but the matter had been taken up by the North of England engineers, who had made a series of experiments with a box, in which there was a lamp revolving under certain velocities. The object was to ascertain the velocity with which a lamp should move to cause an explosion. It was ascertained that in ordinary pits gas explosions occurred when an ordinary Davy lamp was revolved at the rate of 18 ft. per second. This was felt to be so alarming that they determined to resort to more correct experiments to ascertain the exact velocity of current to effect this result. These experiments had now reached such a stage that they were able to have an exact model of what takes place in a coal mine. This was by a pipe constructed with glass windows, so that all can be seen that is going on inside. In the pipe was placed a safety-lamp, with an anemometer, which would show the exact velocity at the time of the explosion. The pipe was placed in the return current, and a communication effected with the intake current, by which a velocity of about 8 feet per second was gained. The lamp became hot, and in three or four minutes would explode. It was an alarming state of things that a Davy lamp should explode at this velocity, which was a common velocity in mines. The result of these experiments was that an inflammable mixture moving 8 ft. per second against a Davy lamp would explode. A Clanny lamp would also explode, but a Stephenson's lamp would not, nor the Belgian lamp. The addition of a shield to a Davy lamp was of very little service.—[The Chairman (Mr. E. W. Binney) said that the lamps which went out were the most valuable. They should likewise be self-acting. To entrust a miner with any other sort was very much to be deprecated.]—Mr. ATHERTON then proceeded with the reading of his paper, which treated of the saving of property and of time. The occurrence of fires in mines might be traced to a variety of causes, sometimes to spontaneous combustion, or blasting coal, when large quantities of carburetted hydrogen were given off; sometimes they occurred at the stables, and occasionally from the wilful act of an incendiary. Imperfectly constructed furnaces also were a cause of fire. But the most frequent fires, and those attended with the most disastrous results, were those which originated in a great explosion. Lately, since science had given more consistency to the means for extinguishing fires, the methods employed were as numerous as the causes of the fire. One engineer would wall up the place where the fire was raging, relying upon the action of carbonic acid gas, the product of combustion, to extinguish the fire. Another would, in addition, cut round the locality of the fire, with a view to establish a strong current of air, which would dispose of the radiated heat, and prevent the spread of the fire. A third would construct a large pump on the shaft, which he would connect with a 3-inch pipe, and play upon the fire at an immense cost, while the fire would constantly evaporate both his water and his coal. Another would construct an apparatus on the pit's bank, and, by the aid of mechanical power, pass an injection of carbonic acid into the mine. However, a more thorough acquaintance with the chemistry of these gases had taught modern engineers that it was better to convert the mine into one vast laboratory for the production of this agent, and let the fire work out its own extinction. There was another expedient—that of filling the mine with water, which he thought was to be avoided. However, it was quite clear that carbonic acid was the great agent to be relied upon. It was the most powerful and effectual means, if they would only give it time; but in mines that gave off much gas, and where the flame would explode before they could operate, explosion after explosion followed, and then there was nothing left but to seal the pit's mouth, except a small pipe to prevent pressure. The question, then, was what could be done—in cases of great general fires, involving the sealing of pits for months—in order to restore them in a short time. His opinion was that both chemistry and mechanics had much to clear up in the interest of mining. The suggestions which he should give as to the mode of extinguishing fires in mines would refer to those mines more particularly in which the fire had taken an extensive hold, and where the mine gave off large quantities of fire-damp, which rendered it unsafe to deal with it, and where the only alternatives were either sealing the shafts or inundating the pit. He was of the opinion, however largely a fire had taken hold of a mine, there was no necessity for inundation, and also that the indefinite length of time at present required for sealing the shafts, in order to extinguish the fire by the action of carbonic acid gas might be reduced to a minimum of eight or ten days. His method was the application of a powerful exhausting air-cylinder, with a view, so far as was in the power of mechanism, to produce a vacuum. He would take, for instance, a mine of the extent of 300 acres, with an 8-ft. seam. Such an area would give 104,544,000 cubic feet, and the exhausting cylinder he would propose to operate upon this would be 6 ft. in diameter, 8-ft. stroke, 30 strokes per minute, which, being double, would equal one stroke per second, or 60 per minute. Assuming no accident, and that it were possible to create a perfect vacuum, in 5½ days the whole of the 104,544,000 cubic feet would be exhausted. If 30 double strokes were too many it might be worked with 15, and the same result would be attainable in 11 days. If they inundated the same area they would have to pump out 2,800,285 tons, which would take a little over two years, at the rate of 2 tons per minute. He quoted the opinion of a celebrated engineer as to the possibility of creating a vacuum. This gentleman said that "an exhaustive cylinder might be constructed, and successfully applied, to secure to a certain extent a vacuum in mines, the extent being limited to about 12½ lbs. upon the square inch." The next thing to consider would be, supposing a vacuum, would it extinguish the fire? Those who have seen fires rage in mines must have been struck with tht rapidity with which they travel, and considering the affinity of flame for all bituminous substances, and an atmospheric pressure of 14·7 lbs. upon the square inch—heightened, again, by the depth of the mines, must think that as soon as the pressure was taken off by the cylinder the heat must surrender itself into that void and pass away. He quoted the opinion of Dr. Black upon the influence of a vacuum upon heated substances, showing that every hot body in the act of cooling, besides losing heat by the conduction of solids and fluids in its neighbourhood, also lost heat by radiation. He, therefore, contended that by creating a vacuum they let loose a cooling agent—carburetted hydrogen. In a shaft 300 yards deep they got 15 lbs. pressure upon the square inch, and gas exuding from the mine in the face of this would be subject to a greater tension. The cost of the apparatus would be about 1800*l.* The lecture was illustrated by diagrams.

Mr. GREENWELL asked Mr. Atherton if he made provision for the liberation of gas at the same time as the drawing out of the air?—Mr. ATHERTON said he did.——Mr. AITKIN said that large quantities of carburetted hydrogen would be liberated, and he asked would there not be a danger of another explosion?—Mr. ATHERTON said they could not have an explosion from an extraordinary discharge of carburetted hydrogen gas, because the pressure would be taken off.——Mr. GREENWELL said, supposing there was a very large fire, they must literate a certain amount of fire-damp. At the time the fire was going on there was not a sufficient quantity of gas to produce an explosion; but as soon as they applied the exhausting principle they immediately increased the exudation of fire-damp from the mine, the mine being still filled, to a certain extent, with atmospheric air, and thus they would get a mixture in the mine, which, from being inexplosive before, became explosive, and thus there was the risk of another explosion.—Mr. ATHERTON said he did not think so, because while they were operating with that machine upon the agglomerated mass, they had there a lot of indefinite gases mixed up with a certain percentage of carburetted hydrogen, and they required a very considerable volume of pure atmospheric air in order to explode. They could not, for want of atmospheric air, exhaust these gases, because the machine which had injected the atmospheric air prevented it from acting.

Mr. DICKINSON said all of them who had had some experience of mines knew the proportion in which explosions occurred in shut-up mines where fire-damp was being given off. It sometimes happened, and sometimes did not. He believed the proportion was 1 in 4. Sometimes there was such a mixture of choke-damp as prevented the explosion from taking place. They must get the pit into such a state as to pass the explosive point before applying the apparatus, and then no additional gas would be a source of danger. There were other points he would criticise. The cylinder was 6 ft. diameter. Now, a pressure of 12½ lbs. per square inch upon a piston 6 ft. in diameter, and working at 30 double strokes of 8 ft. each per minute, would require a tremendous horse-power; but still, if they could shorten the time to one month, much less eight days, it would not be thrown away, and if the plan would tend to the absorption of the heat it would be a great boon to colliery proprietors and the country. As to different plans, his experience had taught him that often plans that succeeded in one mine did not in another.——A GENTLEMAN asked if this plan had been tried?—Mr. ATHERTON said that it was only a suggestion.

The CHAIRMAN thought that the plan would have considerable effect in the early stages of fires, but would not be very effective in the old fires. When the fire got hold of the black shale it was difficult to subdue. He gave an instance of a pit which was full of water for twelve months, and after they had pumped out the water and worked for some time a great mass of red-hot shale fell from the roof. It was easy to get rid of the flame, but not of the effects of the

heated shale.—A GENTLEMAN suggested that the rise workings might have been full of air.—Mr. ATHERTON said that the heated air would surrender itself into the vacuum.

Mr. GREENWELL said he had no doubt that Mr. Atherton's plan would be effectual in mines where there was no fire-damp, but that in mines where there was fire-damp he feared that the first effect of the exhausting process would be to raise the atmosphere of the mine to the explosive point, to cause a blast, and to blow away his scaffolds.—Mr. DICKINSON said it would also act when the mine was reduced to a non-explosive state by the saturation of fire-damp.—Mr. KNOWLES thought the effect of creating such a vacuum would be to cause a general collapse of the interior of the mine.—A GENTLEMAN present spoke of a circumstance of a small fire in a mine which had been put out after burning eight hours. There was an escape of gas from the goaf, which had a cooling effect on the embers.—Mr. ATHERTON said he did not think any objections had been brought against his plan but were capable of being answered. He had great confidence in its efficacy for the purpose for which it was intended.—A vote of thanks to Mr. Atherton and the Chairman terminated the proceedings.

SUNLIGHT IN THE MINES.

Amongst those whose acquaintance with colliery operations, and with the interior of collieries, is limited to what they have read in books, it is customary to regard an explosion as the most lamentable casuality to which the collier is exposed; yet an examination of the statistics annually supplied by the Government Inspectors of Coal Mines (and the abstracts published in the *Mining Journal* of March 16 may be taken as representing the fair average) will show that the deaths resulting from explosions are but few in comparison with those from other classes of accidents, although the circumstance of explosions usually killing the miners wholesale gives them a sensational character, whilst no thought is taken of the far more frequent accidents by which the men are killed singly. Taking the average of the last two years, it appears that for every death resulting from explosion three deaths occurred through falls of roof, and that the deaths resulting from accidents in shafts were considerably more numerous than those caused by explosions; hence it follows that quite as much attention should be paid to "falls" and "shaft accidents" as to explosions, if it be desired to reduce the number of colliery fatalities to the minimum.

That a large number of the deaths from falls of roof, as well as some of those classified as shaft accidents, occur through insufficient knowledge of the faults and irregularities of the strata is beyond question, and it has occurred to Mr. LARKIN, of Clerkenwell, whose beautiful magnesium lamp attracted so much attention at the last meeting of the British Association, that if a reliable and portable lamp could be placed in the hands of the chief underground manager of a colliery, which should enable him to make himself thoroughly acquainted with the most minute details of the structure of the roof, and of any changes which may from time to time take place, an important end would be gained; he has, therefore, constructed a hand-lamp, not much heavier than an ordinary Davy, capable of producing the magnesium light with certainty and regularity, and containing no clockwork or other mechanical arrangements to get out of order.

The new lamp is very compact, and throws a most brilliant light. A spirit-flame is used to ignite the magnesium, and as the flow of the powder can be instantly stopped and recommenced, there is every facility for securing economy, by using the light only during the precise period when it is required. The magnesium is used in the shape of granulated crude metal, mixed with sand, in varying proportions, according to the volume of light required. It is necessary that the powder should be kept beyond the reach of the atmosphere, to prevent deterioration, but this presents no difficulty to the consumer, as it is supplied in suitable cases. The light is well worthy the attention of colliery managers, and is not excessively costly.

FOREIGN MINING AND METALLURGY.

Much satisfaction has been occasioned in Belgium by MM. de Dorlodot having obtained the contract for 7000 tons of rails, required for the Kiew and Balta Railway. The fixed and rolling plant of the line will also, it is understood, be supplied by Belgian works. On the other hand, another affair for the South of Russia has escaped Belgium to the benefit of Prussian works; a small order for rolling-stock has alone been retained by one of the Belgian construction workshops. Railway enterprise is depressed at present on the Continent, as regards construction and also as regards the renewal of way. Thus the administration of the Belgian State lines was about to make comparative experiments on some miles of the way; the object of these experiments was to replace the present rails by somewhat heavier ones, the increase in the weight being rendered necessary by the development of the traffic, and also because the locomotives used have increased in size. But this renewal of way, although deemed indispensable, will be only made slowly, as ready money is just now not very plentiful with the administration of the lines in question. Upon the whole, it must be said that affairs are still in a languishing state in Belgium, both as regards pig and in iron and railway plant. The Belgian coalowners are endeavouring to propagate and sustain the conclusion that prices will be maintained at their present rate throughout 1867. They have, however, to compete with the English on the French littoral and in the Belgian ports; the basins of Valenciennes and the Pas-de-Calais, in the industrial zone of the Nord; the group of the Sarre, in the departments of the East; and the workings of the Ruhr, which, although somewhat remote, have the hardihood to furnish combustible at the very doors of the Hainaut. Against all these rivals the Belgian coalowners still find themselves strong, because the industrial activity which prevails involves a consumption of combustible, such as Belgian extraction cannot meet. We may note the fact, however, that there is an accumulation of fine coal along the Sambre, because the manufactories of briquettes have been obliged to reduce their extraction. The makers of briquettes have been reduced to this extremity because three of the French railway companies have carried elsewhere contracts amounting to 80,000 tons of agglomerates—the Western to England, the Orleans to Montlucon, and the Paris, Lyons, and Mediterranean to St. Etienne. Prices remain for the present without variation; freights are low.

At St. Dizier the market has been losing more and more animation of late. Charcoal-made pig is quoted at 4*l.* 9s. 2d., and coke-made ditto, 3*l.* 2s. to 3*l.* 4s. per ton. Rolled iron from first-class charcoal-made pig has realised 8*l.* 16s.; ditto from coke-made pig, 7*l.* 12s. to 7*l.* 16s. per ton. Special irons have made 8*l.* to 8*l.* 4s., and beaten ditto 10*l.* 4s. per ton. In the Moselle district business is dull; the stock is important, and the coke question pre-occupies every mind. It has been stated that the Creuzot Works had treated for 60 locomotives for England; the affair is in course of negociation, but the announcement that the contract had been secured is premature. On the other hand, the Terrenoire foundries have sold to the Paris, Lyons, and Mediterranean Railway Company 120 tons of pipes, at 7*l.* 4s. per ton. The Paris, Lyons, and Mediterranean Railway Company has also ordered 2000 tons of Bessemer rails at the Terrenoire Works, at 9*l.* 16s. per ton at the works. The same company has given an order to the Fourchambault Works for 200 turntables, at 14*l.* 8s. per ton. It has also given an order to the Fourchambault Works for a very large number of switch bolts, at 13*l.* 16s. per ton. These rates show a reduction from previously reported transactions. It appears from a discussion which has just taken place in the Corps Legislatif that the rates charged for the conveyance of coal by the French railway companies vary greatly. Thus the rates of the Paris, Lyons, and Mediterranean are double those of the Eastern and the Northern, the development of collieries situated in the heart of France being thus checked. The situation of the French coal trade remains nearly the same as has been stated previously. Buyers cannot decide, with some few exceptions, to accept present rates for long-termed contracts, while, on the other hand, coal workers are not inclined to make any concessions. On both sides there is great hesitation displayed, but it is remarked that the uneasiness displays itself more particularly among extractors, while consumers appear calm and tranquil. This is easily explained. Purchasers are justified in believing that nothing can provoke a fresh advance in prices for some time, and they accordingly risk nothing in delaying the conclusion of contracts, as one of two alternatives must arise—either a fall will take place or it will not take place. If it takes place they will profit by it, and will have lost nothing by waiting; in the contrary case, they will be able to make purchases on the same terms as at present, as an advance is not probable. The coal-workers have, on the contrary, everything to fear. A certain complication in the aspect of political affairs in Europe, the constant efforts of German competition, the continuance of industrial stagnation, and a bad crop of beetroot are all unfortunate circumstances, which would necessarily occasion a fall in prices, and a contrary movement is improbable. The singular state of things which prevails seems likely to continue; it cannot last indefinitely, but it would be difficult to determine how matters are likely to end. Prices remain for the present unchanged.

At Havre, Chilian copper has been, to a great extent, neglected, and the reports as to that market indicate no important transaction during the past few days; the article has closed quietly at 75*l.* to 75*l.* 10s. per ton for disposable, and 76*l.* per ton for lots to be delivered in April and May. At Marseilles copper has been in little demand, and prices have been feeble. Paris advices note a similar state of things; English has made 80*l.*; Chilian, 76*l.*; and Corocoro mineral, 80*l.* per ton. There is no important change to note in the tone of the German markets, a slight revival, which had been observed, having disappeared on the receipt of later advices from England; some orders have been received on the Hamburg market, but could not be accepted, in consequence of the low prices offered. A letter from Amsterdam says:—The statistical data, which we have to give you with regard to tin, are rather interesting, and are calculated to justify the good position of the article at the present time. The reduction in the arrivals was anticipated, and so long since as September we referred to this circumstances as calculated sooner or later to exercise its influence. However moderate may have been the quotation of 46 fls., which generally characterised the public sale of Sept. 28, it did not meet with a favourable reception abroad. The market soon after became feeble, and the arrangements of consumers were such that some weeks passed before a better tendency became decisively apparent. The market slowly hardened, and during October a quotation of 46½ fls. was not exceeded. After this date, however, the market revived, and some speculative purchases effected on a large scale caused prices to rise to a rate which seemed to be more in harmony with the true position of the article. There were from time to time periods of quiet, but they were only temporary, and the market continually regained an upward tendency, which acquired a further development when the total quantity likely to be offered for sale, March 28, became known. We now quote the article at 55½ fls. to 55¾ fls. Consumption has followed with a slow step the movements which have appeared on the controlling markets; but it was, nevertheless, obliged to follow them, as it had nowhere stocks of any particular importance. These stocks are now exhausted, consumption proceeding steadily hitherto, and having only purchased to meet the most pressing wants. If the public sale passes off with moderate prices, operations will, no doubt, be attended with satisfactory results. The principal markets have shown during the last few days numerous transactions in tin; but, operators have shown a disposition to restrict purchases to some extent, as they await the result of the Amsterdam public sale, which must exercise a certain influence on the future position of the article. A certain animation has prevailed on the Paris market in consequence of the firmness of the English and Dutch markets; Banca has closed firmly at 98*l.*, Straits at 94*l.*, and English at 90*l.* In Germany the article is sought after, and is dealt in currently at previous rates. The position of the lead markets has not improved, and it does not appear probable that it will, so long as speculation holds aloof; the demand continues quiet, and the article finds no other outlet than in purchases to meet the daily requirements of consumption; there is no change to report in prices. Zinc has been firm at Paris; rough Silesian has made 23*l.*, and zinc from other sources 22*l.* 12s. per ton; some transactions have been noted on these terms. At Breslau, notwithstanding the little importance of the demand, zinc has been very well sustained. The reports received from Hamburg indicate no important movement; at the same time, opinion remains favourable to the article.

A company of English capitalists is said to be on the point of purchasing considerable mines of ironstone in the Sieg district, and in Nassau; it is also proposed, it is stated, to establish near Deutz some very large blast-furnaces. The rough iron obtained will not, however, be worked up in the district, but will be sent to England, to be employed there in the fabrication of steel, a circumstance which shows that the iron is considered to be of very superior quality. Belgium is receiving now excellent coal from Westphalia. The basin of Westphalia is so extensive that, according to the calculations of Herr Kuper, it contains 200,000,000 tons of coal; at present the extraction is only 50,000 tons annually. A judgment of the Brussels Tribunal of Commerce declares the Belgian General Railway Plant Company bankrupt. The quantity of gas sold by the Belgian General Company for Lighting and Heating by Gas amounted, as regards the company's works at Prague, Tournai, Louvain, Charleroi, Marchienne-au-Pont, Chemnitz, Catana, Rimini, Sienna, and Fourmies, to 127,671,298 English cubic feet during Sept., Oct., Nov., and Dec., 1866, and Jan. and Feb., 1867. The corresponding sale of 1865-6 was 112,822,497 English cubic feet, showing an advance of 14,848,801 English cubic feet in 1866-7. The company has also recently acquired some works in the North of France—at Arras, Bergues, Cambrai, Dunkerque, St. Omer, Valenciennes, and Anzin—and these sold in Jan. and Feb. 24,977,623 English cubic feet of gas.

REPORT FROM SCOTLAND.

MARCH 27.—In the case of Connal and Co. *v.* Daunt and others, the 48,000 tons of pig, which is the subject of litigation, has been ordered to be sold by Lord Mure, at sight of an accountant here, in such quantities and at such times as he may see fit, the price to be not less than 51s. per ton, and the money to be lodged in the National Bank of Scotland, to await future orders. When this became known the price of pig-iron slightly rallied, and a trifling advance took place. As this iron may be held for some time, and as it is not to be sold under 51s. per ton, that bugbear has been taken out of the way, and the transactions in this market will be unaffected by this spectre for the future. There is little demand for pigs this week, and shipments have declined 2000 tons, 11,520 tons being the quantity for this week, against 13,590 tons in the corresponding week of last year; still there is an increase on the year of fully 12,000 tons. The market to-day was weaker, and 51s. 7½d. cash was accepted, closing buyers; sellers, 51s. 9d. A meeting of ironmasters was held here to-day, when it was resolved that three-fourths, instead of two-thirds, of the furnaces should be put into blast on Monday. Manufactured iron keeps quiet, and the spring is passing away without realising the hopes of makers. To add to the prevailing unsatisfactoriness, we have had this week a cargo of Welsh bars brought into the Clyde, which are offered at from 5s. to 7s. 6d. per ton under the low quotations current here. This is embittering matters, and is to be traced to the want of orders in all the iron manufacturing districts, both north and south. Prices here are at their lowest, and if they are to be further reduced it will have to be a question with makers how much they are prepared to lose. There is a feeling here that another reduction of wages mus be made in order to allow Scotch makers to keep their own market. The Woodneuk Malleable Ironworks, near Coatbridge, are to be sold by public sale early next month. They belonged to a bankrupt concern, and have machinery and all appliances for producing 500 tons of finished iron per week.

Coals are not improving in demand with the return of fine weather, and prices are being reduced. Of the shipments for the week—18,030 tons—the foreign begins to prevail over the coastwise, and the aggregate quantity nearly balances with that of last year—18,895 tons. The colliers' wages have been reduced in the Rutherglen district another 6d. a day, which brings them down to 4s.; but, at the instigation of the Union, they have preferred to "strike" rather than accept the reduction. As the stocks are pretty heavy, and as the pits are nearly all owned by sale coalmasters, they will be able to allow the men three months' play, if they choose to accept of it. The reduction is confined to this district in the meantime, but it will have to be resorted to in other districts, as the trade is so depressed.

REPORT FROM NORTHUMBERLAND AND DURHAM.

MARCH 28.—The Coal Trade generally may still be described as prosperous, but from various causes many of the collieries have not been fully employed of late. The weather during the greater part of the present year has been of such a character as to interfere seriously with the shipping trading in the north-eastern ports, and commerce generally has suffered in consequence. The position of the Iron Trade has also caused the demand for coke and some kinds of coal to be considerably flatter than it otherwise would have been. But in spite of these drawbacks, the general prospect for the coal and coke trades is good. The weather has moderated considerably, and, in consequence, a large fleet has arrived, and some vessels of heavy tonnage are among the number. A revival of the general trade of the district may, therefore, be expected to take place.

With respect to the iron trade, the reductions lately proposed have been acceded to by the men, and more life may now be expected to be infused into this trade, which has been totally devoid of spirit for a very long period; the rate of wages has been so high that manufacturers could not take orders with a prospect of making a fair profit, but orders will now be more eagerly looked after, and a revival in this trade, which will also cause a general revival of all the trades in the North, is now not only anxiously hoped for, but also confidently expected to take place.

The chemical trades on the Tyne continue to prosper, and several new works are in progress, besides the extension of some of the old ones. New works are in course of erection at Jarrow and other places, and the consumption of ores of various kinds are, of course, on the increase, as coal suitable for the purposes of chemical manufactures is abundant and cheap here, thus trade may be expected to expand to a very great extent, and the importation of copper ore, sulphur ore, manganese, &c., will, therefore, be largely increased; indeed, the quantums of these ores imported in 1866 exceeded very much those imported in the year preceding. The manganese ore imported into the Tyne in 1866 was upwards of 16,000 tons, of sulphur ore 75,257 tons, the sulphur ore imported in 1865 having been little more than half that quantity. The copper and copper ore imported in 1866 was 2823 tons. This is quite an insignificant amount, and this trade may also be expected to greatly increase and expand. At present a considerable quantity of copper and brass is brought by rail from the Midland and Southern districts; indeed, the manufacture of tubes for locomotive boilers, and other purposes, is only carried on here to a limited extent, these tubes being brought from Birmingham and other places ready for use. The ores mentioned above are mainly got from Drontheim, Spain, and Portugal, and a few other places.

The well-known alkali business of the Messrs. Allhusen is henceforth to be carried on as a limited liability partnership. The whole of the promoters are members of Mr. Allhusen's family, and the shares are all taken by the promoters. The object of the undertaking is described as the manufacture and sale of alkali, soda, blacking powder, and all or any other chemical products; the purchase and sale of all or any goods, articles, or materials in any way connected with, or incidental to, such manufacture and sale; the acquisition, sub-holding, leasing, working, and carrying on any mines of copper, coal, clay, or other metals, metallic substances and minerals, and manufacturing the products thereof, &c.

It is lamentable to find that another strike has taken place of the ironworkers at Jarrow. It was fully expected that an agreement had been made by the men there of a similar kind to that made at all the other works in the district; but at the last moment the enginemen and firemen, &c., at the engines used for driving the mills refused to accept the reduction, and thus the whole of the millmen and puddlers also have been thrown out, so that they are once more on strke; it is, however, hoped that a compromise of some sort will shortly be entered into.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

MARCH 28.—The Preliminary Meeting of the South Staffordshire Ironmaster's Association has been held to-day at Birmingham, Lieut.-Col. Barrows, President for the year, took the chair. As was anticipated, no change was made in the trade list of prices, which continue at 7*l.* 10s. for bars, 8*l.* 10s. for hoops, and 9*l.* for plates, at the works. It is to be feared that very few get these rates. The demand during the week has been small. The whole trade has for some time been on a hand-to-mouth system. Small orders are the almost universal rule, not only in manufactured, but equally in pig-iron. People buy a few tons to go on with, the delivery of which is pressed to be immediate, and towards the end of the month the orders almost cease. It is not improbable that now the orders will apply to another month an increase will be experienced. There are signs of recovery in the Australian trade, consequent on the excellent harvest they have had in that colony.

Prof. W. S. Jevons, of Owen's College, Manchester, has been visiting South Staffordshire, with a view, it is understood, to the preparation of a new edition of his well-known and much-read work entitled "The Coal Question." On Monday evening he delivered a lecture at the Birmingham Midland Institute, on "The Probable Exhaustion of Coal in South Staffordshire." Mr. Jevons takes, to some extent, what has been termed by its opponents the alarmist view of the exhaustion of the supply of coal, and he finds in South Staffordshire a prominent illustration of the working out of resources, which he regards as typical of what may be apprehended for the country generally. In describing the actual position of the South Staffordshire coal supply, Mr. Jevons said:—

The unworked portion of the eastern part, near Dudley, was 1160 acres, allowing 20,000 tons per acre; and supposing it to be, in 1860, 23,200,000 tons, giving the rate at which it is being drawn to be 550,000 tons per annum, the probable duration was only 42 years. In the western part there were 2785 acres, which at 20,000 tons per acre make 55,700,000 tons, rate of working 1,550,000 tons per annum, would make the probable duration of the supply 37 years, supposing the demand and consumption to remain as it was. It might be fairly said that in half a century the seam of coal in South Staffordshire—the most perfect store of fuel that had ever been known—would be practically exhausted; there would be very little of it left.

Then came the question of the coal which he, as well as others, believed existed under the Permian strata. He referred to the efforts of Mr. Dawes, at Hales Owen, to discover these supplies with considerable sympathy, but expressed doubts whether private enterprise was competent to make the necessary borings which should satisfactorily determine the depths at which coal beyond the present limits of the coal field could be got, and he was of opinion that the Government ought to take a share of the risks of such experiments, and in proportion to the success to charge the landowners with the cost of ascertaining the existence of coal at workable depths. Criticising the calculations of Mr. Hussey Vivian, Mr. Jevons said that in estimating the cost of deep sinking, as compared with the coal to be got, that gentleman overlooked the interest on the expenditure, and also exaggerated the quantity that could be raised by a single shaft, and gave his opinion that the increased cost would be little short of 2s. 3d. per ton. He noticed that the rise of the iron trade of South Staffordshire was contemporaneous with the advance of this country, and also observed that Birmingham had contributed, by the improvement of the steam-engine, another great lever by which England and the whole world had been raised. But he then showed that of late years the manufacture of pig-iron in South Staffordshire had not been increasing, and gave it as his opinion that it was hardly to be desired that the district should continue the manufacture of crude iron. It could apply its coal to better purposes, and it was for the advantage of Birmingham that the manufacture of iron should not progress in that district, as its supplies of coal were necessary for the other manufactures. He urged that the district must look for future advances to increase in the excellence of its productions, not in the produce of great quantities at a cheap rate, and with this view must in every way promote a superior education for the growing youth of the town and district.

Mr. Davis, stipendiary magistrate of the Pottery District, has given a decision of some importance. Mr. Babes, a colliery proprietor and ironmaster was fined 5*l.* for an infringement of the Mines Inspection Act. A warrant of distress to levy for the amount was issued, to which the return of "no effects" was made. Mr. Babes having failed, and executed a deed of composition under the Bankruptcy Act. Thereupon a warrant of commitment was issued against Mr. Babes, and the amount of the fine was then paid to the superintendent of police, under the protest that the certificate of the registration of the deed exonerated him from liability. Mr. Davis had no doubt that this plea was bad, but had consulted the Tresury and the Home Secretary, who took the opinion of the Attorney and Solicitor Generals. These distinguished legal authorities confirmed his view, so that the amount of the fine would be applied according to law. Mr. Davis, at the same time, submitted a question as to the disposal of the fines. By the Mines Inspection Act penalties are directed to be "applied as one of the Secretaries of State shall direct, according to the nature of the offence, and, subject to such direction, penalties are to be paid into the receipt of Her Majesty's Exchequer, in such manner as the Commissioners of Her Majesty's Treasury may direct." But by the prior Act, establishing stipendiary justices, it was laid down that fines imposed by such justice, "which are, or shall be, by any Act limited and made payable to Her Majesty, or to any person whomsoever, save and except the informer, who shall sue for the same, or any party aggrieved, shall, notwithstanding anything in such Act contained, be recovered for, and adjudged to be paid to, the treasurer, to be appointed under this Act," with an exception as to revenue prosecutions. The question was, did the provisions of the subsequent Mines Inspection Act override this latter? The Attorney-General thought they did; the Solicitor-General, on the contrary, thought the general provision of the Stipendiary Justice Act was to be read with those of the other and more recent Act, and on this latter view, as being more favourable to the district, Mr. Davis said he should act.

At the Brierley Hill Police Court, Mr. Stipendiary Spooner, in passing sentence upon John Bellinson, engineer (whose neglect to lower the skip to test the tackle before letting down men resulted in the death of two colliers), said that the result of the neglect was that two men had been suddenly killed in a horrible manner, and two families thrown on the world. The fine of 5*l.*, which the law allowed him to inflict, was a farce, inasmuch as men would pay that sum, and return to their careless habits. An example was necessary, and the defendant would have to supply that example. He (the Stipendiary) would, however, take into consideration the excellent character given to the defendant by Mr. Whitehouse, and instead of inflicting the full punishment—three months' imprisonment, with hard labour—he should sentence him to six weeks's imprisonment, with hard labour.

Mr. Hooper held an inquest at Old Hill, near Dudley, on Saturday, as to the death of James Guest, a miner, who was killed in a coal mine belonging to Lord Dudley, at the Salt Wells on the previous Tuesday, by a fall of what the miners call a "thing," which is an interposed mass differing from, and really disconnected with in structure, the mass of the stratum in which it was found, and which is peculiarly apt to give way. The place where the deceased was at work was 24 feet wide and 10 ft. high.—Mr. Baker, the Inspector of Mines, was present, and, in answer to him, the doggy of the pit stated that the piece was about 5 tons weight. It fell from the solid. He thought there was scarcely room for timbering. There was no timber in the opening.—Samuel Weaver, miner, stated that he knew of the "thing," but did not think there was any necessity for timbering. The pit looked safe.—Mr. Baker recommended the plentiful use of timber, and thought there was sufficient room for a tree in the place where the deceased was at work.—The Coroner hoped the Inspector's remarks would be attended to. The jury then returned a verdict of "Accidental Death."

THE COAL SEAMS OF ENGLAND.—The Rev. P. B. Brodie, M.A., delivered his third and concluding lecture on "The Geology of Warwickshire—the Drift, the Lias, and the Coal Field"—at the Midland Institute, on Monday. He commenced by observing that he should confine himself to the history of the Carboniferous series. Although the coal field in Warwickshire was of a very interesting character, it was not very large in extent, and in order to give them the general history and character of the coal series he should have to speak of more distant measures. The carboniferous series consisted for the most part of sandstone, clay, hard and indurated clay, ironstone, and various shales. The rev. gentleman pointed out upon the map the various coal fields of England, calling attention to their relative size. Compared with other fields, that of Warwickshire round Coventry, Nuneaton, and Atherstone was not only limited, but the coal itself was of inferior quality, and would soon be worked out. These measures also contained many faults, or great dislocations in the strata, by which the beds are thrown up and down and mingled together. The coal strata are sometimes intersected by dykes, of which there are an incalculable number in the Coventry district, rendering it still more interesting. These upheavals had burst through the coal after it was formed, and spread themselves in masses of shale and other beds which surrounded the coal strata. The lecturer then enumerated some of the varieties of coal, the best of which is composed of bitumen, and comes mostly from Durham and Northumberland. The total thickness of the coal measures includes not only the veins of coal which are workable, but the whole beds of sandstone, clay beds, &c., which are classed under the same series. The thickness of the coal series in the Coventry district is nearly 3000 ft.; and if, in other coal series, the mountain limestone (which is generally included in the carboniferous series) were included, the thickness would in some places be 15,000 or 16,000 feet. Mr. Brodie next spoke of the origin of the coal. Not only amongst the coal itself, but amongst the shales above and below it, many traces of vegetable matter are found. There are many ferns, some of which are found in a very good state of preservation. Remains of a large plant called *Sigidaria* are also met with in large numbers, and must have contributed much to the formation of the coal beds. On the line of the Lancaster and Carlisle Railway there is a section which cuts through a large number of these trees, standing *in situ*, and which might, therefore, be seen in the same position which ages and ages

...ey occupied. Every bed of coal was simply a bed of plants which had ...one great chemical changes and combinations. These coal strata contained remains of insects, but no evidence of land animals, which, however, it was possible did exist during the period in quesion, although the air might ...en highly charged with carbon, and in a very impure state, for he could ...t think that there must have been some order of animals coeval with the ...and insects. Fossil shells and remains of predacious fishes, saurians of ...type, &c., are found. It has been supposed that at the time the coal was ...there were separate islands in what now forms continuous lands, and ...hey were formed by the depression of the great mountain limestone coral ...nd that the coal series were deposited in the hollows. Some persons think ...ere more continuous. Indeed, it appeared that some of the coal fields ...are now disconnected must at one time have been a continuous bed, and ...hen these dykes took place some of the coal strata was thrown up, and ...nce been denuded. He believed both theories were correct according to ...ferent localities. The climate was then probably moist and warm, such ...t of the Brazils and South American countries, which greatly favoured ...owth of succulent and other plants. The lecturer then proceeded to speak ...probable duration of the coal beds. He did not think the Staffordshire ...eld would last longer than 20 years, and he strongly urged the necessity ...omising consumption, and deprecated the enormous waste which is every...visible. He was not at all alarmed at the great question—how long will ...l last? He quite believed that at least it would last 500 years, and in sup...this opinion pointed to the great South Wales coal field, which at present ...ly touched.

DUDLEY GEOLOGICAL AND FIELD CLUB.—The last monthly meeting of this society was held on Friday, at which Mr. H. Beckett, F.G.S., presided. After the ordinary routine business, Mr. W. Madeley, secretary to the club, read a paper on the "Boundary Fault at Himley." The paper was illustrated by a plan and section, showing some very remarkable phenomona of the thick coal strata abutting against the New Red Sandstone in one of the Earl of Dudley's fields at Himley. The writer called particular attention to the thinning out of the coal seams, and the extraordinary tilting up, at nearly a right angle, of the coal measures below the thick coal, as likely to throw some light on the continuation of the coal measures under the Permian and New Red Sandstone on the west boundary of the South Staffordshire coal field.—*Birmingham Daily Post.*

REPORT FROM DERBYSHIRE AND YORKSHIRE.

MARCH 28.—There is not the slightest alteration to notice in the state of the Iron and Coal Trades of Derbyshire. At Staveley, agreeably to a promise made some time since, the working hours of all persons connected with the company's collieries has been reduced. Matters are more favourable at Sheffield than they have been, and the strike at two of the largest ironworks has terminated. Most of the light branches of the Steel Trade are only moderately well supplied with orders, whilst makers of Bessemer, and cranks, axles, and rails are doing a good business. At Penistone, in particular, there is the greatest activity. The various ironworks in South Yorkshire are looking healthier, there being an encouraging improvement at most most of them. At Thorncliff a large quantity of gas and water-pipes are being turned out, the firm having in hand orders for some of 20 and 24-in. diameter for Hamburg. The firm are also just now engaged in the manufacture of a set of gates for the public gardens in the Mauritius, which for elegance of design and appearance are not to be surpassed. The posts are 12 ft. high, and consist of a circular spiral centre pillar about 7 in. in diameter, with four 3-inch posts, and supported by a massive pedestal 3 ft. high and 24 in. square, on each side of which, in relief, are the Royal Arms, surmounted by a very handsomely-executed vase. The two central gates measure 24 ft. in width by 11 ft. in height, and the weight of the whole is about 20 tons. At Normanton, and at several other places, there is a fair trade being done in rails, there being a visible improvement in that important branch, which for some time past has been very quiet. There is a tolerably good demand for house coal for London and the South, but the change in the weather has to some extent affected the trade. For Lancashire there is not quite so much doing, owing to the number of mills in the neighbourhood of Stockport either closed or running short time. There is a heavy tonnage of hard coal and coke being forwarded to the ironworks on the Trent, where the furnaces are kept fully going, maintaining the same position which they have done for the past year—that of having plenty of work for all hands, the Frodingham Company in particular having been very busy indeed.

One of the most important meetings of the mining engineers to whom has been entrusted the adoption of measures for the opening out of the Oaks Colliery, and the recovery of the bodies, was held at the Railway Hotel, Normanton, on Wednesday, the only person present connected with the press being your correspondent. The mining engineers present include—Mr. Woodhouse, Derby; Mr. Potter and Mr. G. B. Forster, Newcastle; Mr. Gilroy, Wigan; Mr. Embleton, Methley; Mr. T. Dymond and Mr. Potter, Barnsley; Mr. Embleton, jun., Mr. Carr, Mr. J. Beaumont, Mr. Mammatt, &c. The proceedings were of great importance, the position of the mine being shown on a very simple diagram, prepared by Mr. Embleton, jun., so that the quantity coming up every hour could be seen at a glance. The report of the manager in charge stated that the pipes formerly in use for conveying the compressed air to the workings had been so much injured by the force of the explosion that holes had been made in them, which evidently retarded the clearing of the shaft. Those have been stopped, and a second scaffold has been efficiently put down above that already hanging by wire-ropes, so that the shafts are now, it may be said for the first time, thoroughly sealed up, as the great escape of gas, owing to the damage done to the pipes, led to the sealing up being far from perfect. The engineers, having taken all these matters into consideration, were of opinion that, considering the inflammable character of the Barnsley seam of coal, and the difficulty of determining the time which elapses before it would be safe to open the old shafts, the most effectual and best plan would be to sink a shaft to the dip of the present workings, so as to sooner open the colliery and recover the bodies, and thus remove, as far as practicable, the possibility of risking the lives of those who may undertake the operation of opening the shaft. The sinking of a new shaft in the neighbourhood of Cudworth will, in all probability, occupy at least a couple of years, but it by no means follows that long before the expiration of that the old shafts will be opened out, and the workings cleared. Even without the accident there is no doubt that, from the extensive character of the coal field, of which Mr. Dymond and his partners are the lessees, that the sinking of a new shaft would have been an imperative necessity, so that it might not be taken as an indication that its completion is required for the recovery of the bodies.

The extension of the Midland and other railways is likely to lead to the opening out of several new collieries, amongst others a large place is expected to be started at once at Carlton, on the estate of Lord Wharncliffe, and another near to Wath. At the new pit which has been sunk in Barnsley in connection with the Darley Main Colliery, at Worsbro', considerable progress has been made, and the shaft has been sunk to the depth of 150 yards, as far as the Kent 9in seam, and by the end of the week it is expected that the thick Kent seam will be reached. It is expected that the Barnsley bed will be reached at a depth of 220 yards in about four months. Now that the Great Eastern Railway is to have free access to the district, there can be no doubt that the South Yorkshire trade will be greatly increased, and the vast mineral wealth of the locality developed to an extent that can scarcely be anticipated.

REPORT FROM MONMOUTH AND SOUTH WALES.

MARCH 28.—The Iron Trade of the district has not yet experienced anything like a substantial degree of improvement, and orders, upon the whole, are coming in slowly. It is well known that very many of the railway companies require supplies to replace their daily wearing-out rolling stock, and also for what may be termed indispensable new works, but the insane and senseless panic which has seized debenture-holders renders directors doubly cautious in giving out their orders. As might be expected, this has had its influence on the requirements of wagon-works and other branches affiliated to railways, and where 100 tons of iron formerly went, it is a point now to secure a transaction for 20 tons. On American account there are several engagements for railway iron in course of execution, but as hinted last week, it is rather difficult to give a reliable opinion as to what the future of the trade with that country will be. The advices from New York are somewhat contradictory, but all are agreed that the requirements of the Southern States will be large, once something like regularly constituted Governments are established in these provinces. Railway extensions are in contemplation on the Continent, and some of the iron required will, no doubt, be obtained from this country, although the Rhenish provinces and Belgium are becoming keen competitors. For pigs the enquiry is dull. Tin-Plates command a fair export sale, and home requirements are large.

A favourable change is to be recorded in the weather, and the scarcity of tonnage which has so long prevailed in the Coal Trade is likely to soon pass away. Already a good number of vessels have arrived, many of them ready chartered, and the result cannot fail to be far more regular employment at the collieries. On continental account engagements are being entered into with more freedom, and the mail packet companies are taking about the same quantity as in January and February. House coal proprietors are doing an average inland business, and since the change of weather the coasting trade is beginning to move. For coke there is a limited demand.

The Treforest Tin-Plate Works are now in active operation, and additional mills will be shortly at work. The starting of this establishment has been the means of giving employment to a large number of hands, and the neighbourhood of Treforest and Pontypridd wears a more active aspect than for many years past.

The Gethin Fund Committee fifth annual meeting was held at Merthyr, on Wednesday (Mr. J. D. Thomas in the chair). The report showed that the relief paid, and other expenses incurred during the year ending Feb. 14 had amounted to 580*l.* 18s. 3d., and the credit balance was 475*l.* in India stock, 58*l.* 14s. 2d. at the bank, making a total of 480*l.* 14s. 2d. It was stated that from a computation made by the secretary (Mr. Stephens), the fund will last until 1882, provided the children are taken off the fund at the age of 14. It was resolved to sell another 250*l.* worth of India stock, in order to meet the payments for the current year. The weekly payments have now fallen to 10*l.* 10s. 6d. per week, being 3*l.* 3s. per week less than in the first year. The Chairman announced the resignation, in consequence of his removal to Swansea, and a cordial vote of thanks was passed to him for the valuable aid he had given in the management of the fund.

The workmen employed in Messrs. Richards and Glassbrook's collieries have presented the manager, Mr. A. Grey, with a splendid compass, value 25*l.*, as a testimonial of respect and esteem.

In a previous report it was hinted that on some portions of the South Wales section of the Great Western there was every probability that the narrow-guage would soon be laid. It is now announced that arrangements are in progress to add a third rail, from Neath to Port Talbot, thus bringing the Vale of Neath narrow guage system into direct communication with the Briton Ferry Docks, and the important iron, copper, tin-plate, and coal works in the neighbourhood of Port Talbot, belonging principally to the Governor and Company of Copper Miners in England. The funds for carrying out this extension are, it is said, to be provided by private parties, under a special agreement with the Great Western directors.

Mr. F. French, formerly and for many years superintendent of the Great Western Wagon Works, South Wales division, has received the appointment of superintendent of the extensive wagon works of Messrs. Shackleford, Ford, and Co. (Limited), at Swansea, and entered upon active duty on Monday. Mr. French, from his practical knowledge, managerial ability, and energetic conduct, will be an acquisition to the working staff of the firm in question. Mr. French succeeds Mr. Ford, who formerly held the management.

The arrivals at Swansea include—the Elena, from Bilboa, with 540 tons of iron ore, for W. H. Tucker; the William Graham, from Hondeklip Bay, with 420 tons of copper ore, for Richardson and Co.; the Marianne, from Nice, with 1051 sacks of lead ore, 419 barrels of copper ore, and 90 tons of iron ore, &c., for H. Bath and Son; Diana, from St. Nazaire, with 109 tons of iron ore, for T. H. Walters; the San Fernando, from Aposa, with 550 tons of copper ore, for H. Bath and Son; Fearless, from Hondeklip Bay, with 339 tons of copper ore, for Richardson and Co.; the Zugia, from Palermo, with 50 tons of brimstone, to order; Glanavon, from Hondeklip Bay, with 220 tons of copper ore, 19 tons of regulus, and 37 tons of unwrought copper, for Richardson and Co.; the Maravilla, from San Francisco, with 766 tons of copper ore, 36 tons of plumbago, and 29 tons of manganese, &c., for T. Wood and Co.

SOUTH WALES INSTITUTE OF ENGINEERS.—The quarterly meeting of members was held, on Wednesday, at the Castle Hotel, Merthyr Tydvil, Mr George Martin (the President) occupied the chair, and there was a fair attendance. The discussion on the papers—"Duration of the South Wales Coal Field," by Mr. Beddington; and "The Port of Newport, and its Coal Field"—was adjourned until the next meeting, in consequence of Mr. Bassett's absence; the two papers to be then discussed together. An interesting discussion took place on Mr. Cope Pearce's paper on "Mechanical Ventilation," and also on Mr. Vivian's paper on the "Structure of Iron." After the meeting the members dined together as usual, and the usual loyal and complimentary toasts followed. A full report will appear in next week's *Mining Journal.*

FOREST OF DEAN.—The favourable change in the weather has produced a return of business in this district—heavy freights are again being conveyed down each of the Forest railways, and the late accumulation of coal is rapidly becoming less. At Mr. Holmes's Howbeach Level, near Moseley Green, after two years' incessant work, accompanied by a considerable outlay, the Coleford High Delf vein has been reached. This vein is extensively worked on the Coleford side, and also at Whitecroft, where it crops out. It is also being worked at Mr. Walker's pit; the other crops out on the eastern side of the Dean Forest, but Mr. Holmes is the first in this valley who has worked it. It is said to be some 3 ft. at least in thickness, and will be much thicker as they advance, and coated with a stratum of rock, the position of which is highly favourable, and this circumstance will save the cost of timbering, so extensively used in the Forest, and so frequently attended with loss of life. The quality of the coal is particularly good both for engineering and household uses, and it is exceedingly inflammable and gaseous. Being adjacent to the Forest of Dean Central Railway, it is the more valuable on this account. The works at the Soudley iron furnaces are progressing favourably. The manager anticipates that in six weeks it will be put in blast. The Forest of Dean Central Railway is nearly completed, and the stations are likewise progressing, but with the exception of the coal at Mr. Holmes's works there is no other sign of traffic being sent down this branch It runs very near the Fancy Pit, belonging to the Parkend Coal Company, at which some 250 tons of coal are raised daily; but at this line there is no indication of a siding being put in, the present route being down the Severn and Wye Railway, as it is more convenient for shipping. Unless the line is extended to Cinderford, the original shareholders cannot hope of receiving any return for some years. On Wednesday, the newly-erected furnace at Parkend was put in blast, and in the evening the whole of the workmen were liberally entertained by their employers, Messrs. James and Greenhorn. The event was regarded with much interest, and duly celebratated at Parkend. It is a cupola furnace, 45 ft. in height, fitted with patent self-feeding stoves. A more detailed description appeared a few months since in the *Mining Journal.*

Royal School of Mines.

MR. WARINGTON SMYTH'S LECTURES ON MINING.

LECTURE XLIII.—The next portion of the subject of the removal of the mineral underground, and raising it in the shaft, was one of a purely mechanical character. In this country the duties of a mining engineer were to a great extent separate from those of a mine manager; and hence the latter obtained much more assistance in the mechanical department than he could look for in the colonies or in foreign countries. In Great Britain it was very unusual for a mine manager to be able to go into all the details of the construction of the engines he requires; but, nevertheless, it was extremely desirable that he should be able to give an opinion as to the best classes of machinery to be applied to the various works under his charge, and the amount of power requisite for certain purposes. If they took the whole area covered by machinery, it would occupy a great deal more time than most men had at their disposal, but they might gather together the experiences of those who had devoted time and attention to the subject, and thus become acquainted with those forms of mechanical power most adapted for mining purposes. There were, undoubtedly, details which were better left in the hands of those who devoted themselves to the construction of machinery, and nothing else. A division of labour was fully carried out in this country and in France and Germany, but they could not expect it in lands where mechanical science was at a low ebb, and where works were carried on in an inferior manner to the scale and methods employed in countries at the head of civilisation. Supposing, then, a mining engineer from England were employed in some countries, such as in parts of Italy, in Spain, and in the colonies, he could order many engines ready made here to be sent out to him; but there would be some he must have constructed for himself on the spot, and he should, therefore, be able to prepare proper drawings for what he requires, to put together the disjointed pieces he has had made, and to repair or modify them to suit varying circumstances, which was often required in metalliferous mines. In some districts in this country there is a good deal of uncertainty as to the term "mining engineer." The word "engineer" in the English language is very indefinite, and one hardly knows sometimes whether a stoker or a civil engineer, the man at the head of the profession, is meant. The term mining engineer is almost as bad. In Cornwall and Devon men are very often good miners, who cannot claim the title of engineer. On the other hand, a man may be a good mining engineer, and never go below the surface—that is, he may make drawings and calculations, construct steam or other engines, and exercise a constant supervision over them. Indeed, it is in this latter way that all mining engines are kept in order. Some men have established high reputations in the profession simply by the preparation of drawings, and supervising the construction of mining engines from those drawings. There are points which differ a good deal in different districts, but the more rude and uncivilised the country the greater is the necessity for the mining engineer to be able to turn his hand to anything, and not only to be able to prepare drawings for the different parts of a machine, but to put them together. Without attempting to follow all these details, the lecturer then proceeded to remark upon the various kinds of machinery used in mining. First, as to POWER. That might be either human or horse labour, and water or steam power. In the two first the machinery was of a very simple character. As to water-power, this was chiefly used in hilly districts, where they had considerable falls in height, with a comparatively small weight or bulk, and in such cases the overshot wheel was much better than any other sort of wheel. There were, however, three kinds in use—1. The undershot wheel, of 3 or 4 ft. in diameter.—2. The breast wheel, in which the water takes the wheel about the centre.—3. The overshot wheel, in which the water is led over the top of the wheel, and then directed into buckets placed on the periphery at angles, into which the water falls, and by which two-thirds is obtained of the power due to the actual weight of the water and the height from which it falls. Several modifications of these wheels had been made of late years, and inasmuch as this is a class of machinery employed more than any other, on account of its cheapness, an engineer ought always to be able to construct them, or to superintend their construction, and to understand them fully. He then proceeded to describe the construction of various kinds of wheels, commencing with the "overshot" variety. The axle was a very expensive part of the wheel, being one of the principal portions, as upon it was laid all the strain in working. To give them an idea of the cost of the axle of a wheel of considerable size, he might state that the axle of the wheel at the celebrated and very productive lead mine at Laxey, in the Isle of Man, which was 72 ft. in diameter, cost no less than 500*l.* This, in fact, was the largest wheel in the world. Supposing they had a large fall of water, they should proportion the height of the wheel to the fall, and it would also be necessary to have some depth for the tail water, so that the wheel should not dip into it, and thus occasion a loss of power. As to the construction of the overshot wheel, it consisted principally of an axle or axis, a centre boss, the arms, and the circumference on which the buckets were placed, the circumference being usually termed the shrouding or rim of the wheel. The axle of a wooden wheel was made of a stout piece of oak, and it had gudgeons, which were fastened in a mortice cut towards the extremity of the axle, and afterwards hooped round with a piece of wrought-iron, to bind it closely together. Of the iron wheels, which were largely used in this country, the axles were made either of cast-iron or of wrought-iron. The cast-iron axles were made in a great variety of forms; sometimes they were cast solid, and in some instance they were ribbed, in order to give them additional strength, while in other cases large hollow castings were employed. Of late years the axles had been made of wrought instead of cast iron, because, although the first cost was greater, they had the advantage of being less bulky, and hence more convenient for shipment; and there was the further advantage that they were of a more tenacious character, and consequently more durable. If there were heavy work it was necessary that the bearing should rest upon brasses, and that these should be fitted as closely as possible. The old wooden wheel used to be made of main or master arms, and auxiliary arms. Where the whole of the wheel was of wood the rim was usually made of oak, and built together in segments, which were generally strengthened at the joints by iron plates. The most convenient kind were those made partly of cast-iron and partly of wood. In the last century, when the pumping-engine was in a more advanced state than the rotary-engine, and when wheels were very extensively employed at the collieries, pumping-engines were erected for the sole purpose of lifting the water to a sufficient height to work the wheels. In reference to the buckets, they were constructed in a variety of forms; but the principal point to be looked to was to give them the greatest capacity for holding water by arranging them at the proper angle, and allowing the weights to act upon as large a portion of the circumference as possible. One difficulty met with in connection with the buckets was the tendency of the air which lodged in the bottom to exclude some of the water, and this had been obviated by Mr. Wm. Fairbairn, the well-known engineer, who had devised a very ingenious plan to "ventilate" the buckets. Another form of machinery in which water came very largely into play was the turbine wheels, which had of late years been much more extensively adopted than formerly; to a less degree, however, in mining than in other departments of industry. The turbine was only employed where it was desired to get a rotatory motion at a high velocity. Hence it was in the raising of minerals in shafts rather than for pumping and ventilating purposes that the turbine was more especially applicable. He should not omit to state, as regarded water-wheels, that they could only be advantageously employed within certain moderate limits of velocity, as it was obvious if they turned too fast there was a loss of power. The most economical speed to drive the overshot wheel was when the circumference travelled at the rate of 6 to 9 ft. per second. It was not advisable to have the wheels larger than 30 to 40 ft. in diameter, otherwise they would not get the full effect from them. Hence, if greater power than would be derived from one of that size were requisite it would be desirable to have two wheels. Another application of water-power which had of late years come into use was the hydraulic-pressure engine, the power being gained by the weight of a lofty column of water. This was a very useful invention, but it required very careful workmanship. It was, however, now thoroughly well understood in this country through its application under an infinite variety of circumstances, by Sir W. Armstrong, who had made a great number of them; and in one form or another they might be seen at all the railway stations. A great many were now employed in mines.

THE ROSSA GRANDE GOLD MINING COMPANY (LIMITED).—Notice is hereby given, that the directors have this day made a CALL of TWO SHILLINGS AND SIXPENCE PER SHARE, payable at the London and Westminster Bank, Lothbury, on or before the 24th day of April next.

The Transfer-books will be closed from the 25th to the 30th of March, both days inclusive. By order,

C. B. PARRY, Secretary pro tem.

182, Gresham House, Old Broad-street, London, March 25, 1867.

N.B.—By the Articles of Association calls in arrear are subject to interest at the rate of 10 per cent. per annum.

PREUSSISCHE BERGWERKS AND HUTTEN-ACTIEN-GESELLSCHAFT.

PRUSSIAN MINING AND IRONWORKS COMPANY (Limited under Prussian Law).

PAYMENT OF SIXTH AND SEVENTH (last) CALL.

The shareholders are requested to PAY to the Direction of the Company, at their office, No. 30, Bentather-street, Dusseldorf, or at any of the undermentioned bankers,

THE SIXTH CALL OF TWENTY PER CENT., OR SIX POUNDS PER SHARE, on or before the 10th of May next;

THE SEVENTH (last) CALL OF TWENTY PER CENT., OR SIX POUNDS PER SHARE, on or before the 29th of June next.

In accordance with par. 9 of the Statutes, interest at the rate of Five per cent per annum is allowed upon all payments made upon the calls. The Council of Supervision is also empowered to fix the terms upon which, instead of payment by calls, full payment of the shares can take place, and in order to carry out the suggestions for the more rapid completion of the works of the company (for which everything is now favourably prepared), made in the report at the first general meeting of the company, on the 7th May last, they have passed a resolution to allow interest at the rate of Six per cent. on payments in full made for any number of shares, in advance of calls.

The "quittungsbogen," which have been issued by us upon the payment of the first call, should be presented at our office, or at the bankers, when further payments are being made, in order to have the same acknowledged on the face thereof, as provided by par. 9 of the Statutes.

Shareholders paying in full on the whole or on any number of their shares will have the full payment acknowledged on the respective "quittungsbogen," which can then without delay be exchanged for the shares themselves, which latter are, in accordance with the Statutes, issued to bearer, and are, therefore, transferable without endorsement.

PRUSSIAN MINING AND IRONWORKS COMPANY.

Dusseldorf, March 25, 1867. THE COUNCIL OF SUPERVISION.

The bankers of the company are—for England and Ireland: The National Bank, and its branches.

THE NEW NANTYMWYN MINING EXTENSION COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, whereby the liability of each shareholder is limited to the amount of his shares.

Capital £50,000, in 50,000 shares of £1 each; 5s. deposit on application, and 5s. per share on allotment.

No call will be made for six months, and it is probable from the prospects, with the assistance of the ore money, that no further capital will be required.

DIRECTORS.

Capt. WM. A. RUMBELOW PEARSE, R.N., St. Peter's-square, Hammersmith, and Senior United Service Club, Pall Mall.

Major R. E. F. CRAUFURD, late Royal Artillery, 27, Oakley-square, Brompton, London.

FRANCIS WILLIAM STONE, Esq., late H.E.I.C.S., 15, Royal Avenue-terrace, Chelsea, and 6, Prospect-place, Hastings.

HENRY O'MALLEY, Esq., Barrister, 23, Sidney-street, Brompton, and Kilboyne House, Mayo, Ireland.

CHRISTOPHER RIGBYE A'HMUTY, Esq., 137, Cambridge-street, South Belgravia, London. [don.

HENRY CLINTON COOPER, Esq., 73, Gloucester-street, South Belgravia, London.

FRANCIS JOSEPH SLOCOMBE LESTER, Esq., Wellington-road, Gravesend, Kent, and Goodwood-road, New Southsea, Hants

(With power to add).

BANKERS—The North and South Wales Bank, Welshpool; and Messrs. Jones and Co.'s, Bank, Llandovery, South Wales.

AUDITOR—George Atkins, Esq., Sydney Villa, Richmond, Surrey.

BROKERS—Messrs. Barrett and Co., 20, Spring-gardens, Charing-cross, and 78, Lombard-street, London.

MANAGER AT THE MINES—Capt. R. Rowse, Mining Engineer.

SECRETARY—William Henry Harden, Esq.

REGISTERED OFFICES.

No. 5, BATAVIA BUILDINGS, HACKINS' HEY, LIVERPOOL.

ABRIDGED PROSPECTUS.

The object of the company is to acquire three valuable mining properties in Carmarthenshire—that is to say, New Nantymwyn, Gilfach, and Glan-Towy.

New Nantymwyn is a continuation westward of the celebrated Nantymwyn Mines. These mines have been worked to immense profit for centuries, and appear to be perfectly inexhaustible. Some idea may be formed of the great value of these lodes from the fact that they occupy a channel of 180 ft. in width, consisting of six divisions or lodes, and that a sink on one of them is now yielding 18 tons of rich quality ore, worth upwards of £200 per fathom for lead.

2.—The Gilfach property consists of a lead mine, worked to some extent, and furnished with water machinery, in which a discovery of lead ore has been made by an adit. It is proposed by the company to extend the shaft downwards on this course of ore, as well as to explore another discovery of ore in the sett on the Lady Eliza No. 2 lode, where there is a good back of ore ground cropping up to, and extending a considerable length along, the surface.

3.—Glan-Towy is an old lead mine. Shafts, which have yielded lead ore in some quantity, exist on the top of the hill, and the present company propose to drive an adit to prove the value of the lode under the old sinks.

Plans taken from the Ordnance Survey, showing the exact position of the lodes, together with ground plans of the estate sections of the mines, and reports by skilful mining engineers, are appended, and will be forwarded on application to the secretary. Specimens of the ore may be seen at the company's offices.

Taking into consideration the position of the mines, the highly favourable prospects, and the return of ore being immediately available, the directors feel confident that, with the outlay proposed, profits equal to the adjoining mines will be participated in by the shareholders.

Applications for shares, to be accompanied with the deposit of 5s. per share, may be made to the secretary, at the offices of the company, or to the bankers.

FORM OF APPLICATION FOR SHARES.

To the Directors of the New Nantymwyn Mining Extension Company (Limited).

GENTLEMEN,—Having paid to your bankers the sum of £ , being a deposit of 5s. per share on shares of the above company, I hereby request that you will allot me that number, and I agree to accept such shares, or any less number you may allot to me; and I agree to sign the Articles of Association of the company when required, and I authorise you to place my name on the register of shareholders for the shares allotted to me.

Usual signature.....
Name in full .....
Residence.....
Date..... Profession .....

Notice is hereby given, that NO APPLICATION FOR SHARES can be RECEIVED after SATURDAY, March 30, 1867.

COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.

All communications to be made to Messrs. FIRTH, DONNISTHORPE, and BOWER No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

ANALYSES OF COAL, CANNEL, MINERAL OILS, and all OIL PRODUCING MINERALS are UNDERTAKEN by

A. NORMAN TATE, F.A.S.L., &c.,

ANALYTICAL and CONSULTING CHEMIST, and CHEMICAL ENGINEER

(Author of "Petroleum and Its Products," &c.),

MOLD, NORTH WALES.

Plans and estimates for oil and chemical works prepared, and their erection superintended.

Assays of metals and their ores carefully conducted.

CAPT. RICH, BODMIN, CORNWALL, being in the centre of the mining districts of Devon and Cornwall, and having had 25 years' experience in the management and inspection of mines, OFFERS HIS SERVICES to INSPECT and REPORT on MINES in either of the above counties. Orders promptly attended to.

MR. CHAS. BAWDEN, ST. DAY, SCORRIER, CORNWALL, will be happy to ADVISE with CAPITALISTS as to the BEST MINES for INVESTMENT in CORNWALL and DEVON.

THE IRON TRADE REVIEW.—The Iron Trade Review is now recognised as the leading organ in which the interests of the iron manufacturers of Great Britain are represented. The aim of the proprietors is to provide a journal which shall be worthy of this important branch of national industry. The following matters receive special attention:—Detailed reports of the state of trade in all the important manufacturing districts, with latest intelligence of meetings, and price lists of pig and finished iron. Occasional notices of the Continental and American trades. Condensed information relative to the proceedings of railways and other public companies which have a bearing upon the iron trade. Notices of scientific improvements applicable to the manufacture of iron. Reports on such labour questions as may arise. Notes on Parliamentary Bills bearing on the trade. In addition to the above, leading articles on important topics appear in each issue, and great care is taken that the information contained in the Review shall be thoroughly reliable. The annual subscription is one guinea, payable in advance. Advertisements are inserted on reasonable terms, which may be ascertained on application.—Published for the proprietors, at the Iron Trade Review office, Middlesbrough-on-Tees; and at 50, Grey-street, Newcastle-on-Tyne, by M. and M. W. Lambert, printers.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Devon.

IN the MATTER of the COMPANIES ACT, 1862, and of the SWINCOMBE VALE MINING COMPANY (LIMITED).—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 6th day of April next, to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to WILLIAM MICHELL, Esq., the Registrar of the said Court, at his office in Truro.

Dated Registrar's Office, Truro, 26th March, 1867.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the PENHALE AND LOMAX CONSOLIDATED SILVER-LEAD MINING COMPANY (LIMITED).—Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was, on the 22d day of March inst., presented to the Vice-Warden of the Stannaries by Jabez Tuck, a creditor of the said company, and that the said petition is directed to be heard before the Vice-Warden at No. 18, Thurloe-square, South Kensington, in the county of Middlesex, on Thursday, the 4th day of April next, at half-past Eleven o'clock in the forenoon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioner, his solicitors, or agent, of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., secretary of the Vice-Warden, Truro.

Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same, from the petitioner, his solicitor, or agent, within 24 hours after requiring the same, on payment of the regulated charge per folio.

Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's Office, Truro, on or before Tuesday, the 2d day of April next, and notice thereof must at the same time be given to the petitioner, his solicitor, or agent.

A. PULBROOK, 28, Threadneedle-street, London
(Solicitor for the petitioner).
J. G. CHILCOTT, Truro
(Agent of the said Solicitor).

Dated Truro, the 26th day of March, 1867.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the PENHALE AND LOMAX CONSOLIDATED SILVER-LEAD MINING COMPANY (LIMITED).—Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was, on the 22d day of March instant, presented to the Vice-Warden of the Stannaries by the said Penhale and Lomax Consolidated Silver-Lead Mining Company (Limited) and Thomas Eyre Foakes, Richard Davis, and Stewart Smyth Windham, directors and also shareholders of the said company, and Henry Lewis Phillips, the managing director and also a shareholder of the said company, and that the said petition is directed to be heard before the Vice-Warden, at No. 18, Thurloe-square, Brompton, in the county of Middlesex, on Thursday, the 4th day of April next, and half-past Eleven o'clock in the forenoon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioners, their solicitor, or his agents, of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., secretary of the Vice-Warden, Truro.

Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same, from the petitioners, their solicitor, or his agents, within 24 hours after requiring the same, on payment of the regulated charge per folio.

Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's Office, Truro, on or before the 1st day of April next, and notice thereof must, at the same time, be given to the petitioners, their solicitor, or his agents.

HODGE, HOCKIN, AND MARRACK, Truro, Cornwall
(Agents for W. Compton Smith, 48, Lincoln's Inn Fields, London,
Dated Truro, March 23, 1867. Petitioners' Solicitor).

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the RETANNA HILL MINING COMPANY.—TO BE SOLD, BY PUBLIC AUCTION, at and upon the RETANNA HILL MINE, situate in the parish of Wendron, in the county of Cornwall, under the direction of the Registrar of the said Court, on Friday, the 12th day of April next, at Twelve o'clock at noon, subject to such conditions as shall be then and there produced, a STEAM ENGINE, 21 in. cylinder, without boiler.

To view, apply to Mr. VERCOE, at the mine.

JOSEPH ROBERTS, solicitor, Truro.

Dated Registrar's Office, Truro, 28th March, 1867.

In Chancery.

IN THE MATTER OF THE COMPANIES ACT, 1862, AND IN THE MATTER OF THE NANT COAL COMPANY (LIMITED).

TO COLLIERY PROPRIETORS AND OTHERS.—SALE OF THE NANT COLLIERY, FLINTSHIRE.

MR. J. PICKERING has received instructions from the Liquidators appointed to wind-up this company, to OFFER FOR SALE, BY AUCTION, on Wednesday, the 17th day of April, 1867, at the Grosvenor Hotel, in the City of Chester, at Three for Four o'clock (unless disposed of by tender on or before the 1st of April), the whole of the EXTENSIVE and very VALUABLE MINERAL PROPERTY, known by the name of the

"NANT COLLIERY,"

Situated three miles from the town of Mold, nine from Chester, and twenty-six from the shipping port of Birkenhead, together with the LEASES, PLANT, MACHINERY, &c.

The area of this property is about 500 acres of the best mineral ground in Flintshire, containing all the celebrated North Wales Steam and House Coal and Cannel. It is held by leases granted by the Lords of the Manor of Mold, and the Trustees of Ruthin Grammar School. These leases are for a term of twenty-one years each, seventeen of which respectively are unexpired. They contain the usual clauses for renewal, if required. The royalties and minimum rents are very moderate.

Of the area above mentioned about 40 acres only have been wrought, leaving the remainder intact.

The Mold branch of the London and North Western Railway runs through the centre of the property, and the pits are connected with it by a private locomotive branch nearly a thousand yards long, with all junctions, points, crossings, gates, &c., complete, thus affording convenient access by the narrow-guage system to all parts of the kingdom.

The PLANT on the colliery is very extensive and good. It comprises ONE HORIZONTAL HIGH-PRESSURE PUMPING-ENGINE, with three boilers and fittings, cranks, bobs, rods, and 12-in. pitwork complete; TWO ditto WINDING ENGINES, with three boilers and fittings, double pit-head frames, flat wire-ropes, cages and conductors, complete; capstans, shears, jackroll, &c.; two wrought-iron screens, with iron tipplers; a PORTABLE ENGINE, and new iron saw-bench of the most modern construction, with self-acting adjustment, and two circular saws of 4 ft. and 3 ft. diameter respectively; a TANK LOCOMOTIVE ENGINE, nearly new; a large quantity of iron tubs, water tanks, rails, plates, and crossings; a very good and useful assortment of smiths' and carpenters' tools, various timber, stoves, and loose materials.

This colliery being immediately contiguous to the extensive and well-known Buckley Brick and Tile Works, which consume a very considerable amount of fuel, a constant local demand is afforded for its produce.

The whole will be sold in one or more lots, of which due notice will be given.

The Auctioneer has much pleasure in offering this valuable property to capitalists as an investment rarely to be met with.

Tenders may be forwarded to the Liquidators, but they will not be bound to accept the highest or any tender that may be made.

For further particulars, and to view the same, apply to Mr. J. HOLCROFT, on the premises; the Liquidators, H. MCCREIGHT, Esq., 6, Raymond's-buildings, Gray's Inn, London, and 21, Waterloo-street, Birmingham, and ALFRED HARRISON, 48, Paradise-street, Birmingham; or ROBERT H. FOSTER, Esq., Solicitor, Birmingham; and to the Auctioneer, the Eastgate, Chester.

Catalogues, containing plans, sections, &c., can be had twenty-one days prior to the day of sale, from the Auctioneer, and from the principal hotels in Chester, Mold, and Birmingham.

GLAMORGANSHIRE.—VALUABLE COLLIERY.

MR. ROBERT EVANS WILL SELL, BY AUCTION, at the Castle Hotel, Neath, on Thursday, the 25th day of April, 1867, in One Lot (unless previously disposed of by private contract), the VALUABLE COLLIERY, known as—

THE VENALLT STEAM COAL COLLIERY,

In full working order, situate at Glyn-Neath; comprising VALUABLE SEAMS of STEAM COAL, IRON ORE, and BLACKBAND. Among the seams in the Upper Series is included the famous Resolven vein of steam coal, on the Admiralty List, and extensively worked on the adjoining property. The mineral taking comprises about 430 acres.

The Vale of Neath Railway (broad and narrow gauge) runs through the Venallt Estate, placing the colliery in direct communication with the ports of Swansea, Port Talbot, and Briton Ferry (less than 15 miles distant); also with Liverpool and the North; and by the Great Western Railway there is direct communication with London; the tolls between the colliery and the Paddington Terminus (including City dues) being under 8s. per ton.

All the necessary works, appliances, and buildings have been erected, and very commodious broad and narrow gauge railway sidings, tipping stages, and roads formed, and about 20 cottages are held at moderate rents.

The two upper veins have been thoroughly opened by level and slant; at the present time from 100 to 150 tons of coal a-day can be raised, which within six weeks could be increased to 200 tons.

Particulars and conditions of sale, with plan, may be obtained of Messrs. TUCKER and NEW, solicitors, 4, King-street, Cheapside, London; and of Mr. ROBERT EVANS, land agent and auctioneer, Bridgend. May be viewed by giving one day's previous notice to Mr. WILLIAM EVANS, agent, Venallt Colliery, Glynn-Neath.

TO BE SOLD, cheap, a PORTABLE ENGINE of 14 horse power, double cylinder, of first-class construction, workmanship, and material. Winding gear to order. SECOND-HAND PORTABLES FOR SALE.—Apply to Messrs. BARROWS and CARMICHAEL, engineers, Banbury, Oxon.

IMPORTANT TO ENGINEERS, MACHINISTS, SMITHS, AND OTHERS.

MR. P. KITCHEN has been instructed to SELL, BY AUCTION, by order of the Assignees of Messrs. Forsyth, Robertson, and Brass, on the premises, Corkickle Engine-works, Whitehaven, on Friday and Saturday, 5th and 6th of April, 1867, commencing each day at Ten A.M., the whole of the MACHINERY, PLANT, TOOLS, &c., consisting of horizontal and vertical ENGINES and BOILERS; PLANING MACHINE, 3 ft. stroke; 11 in. lathe, screw cutting lathe, 15 ft. bed, with tools; 7½ in. heads screw cutting lathe, 8½ ft. bed, with tools; 12 in. heads lathe, 39 ft. bed, with tools; three drilling machines; portable boring bar and gearing; powerful punching machine; plate bending machines; Whitworth's screw gear, from ⅝ to 1¼ in.; gas screwing gear, from ½ to 2 in.; Weston's patent deferential pulley blocks, from ½ to 4 tons; bar and angle iron; boiler plates; portable forges; blacksmiths', boilermakers', and fitters' tools, &c., &c.

N.B.—The above can be inspected on application to Mr. D. ROBERTSON, Church-street, Whitehaven; and catalogues can be had of the Auctioneer, on and after the 26th inst.—17, Lowther-street, March 22, 1867.

PRELIMINARY ADVERTISEMENT.

IMPORTANT IRONWORKS IN MONMOUTHSHIRE FOR SALE.

THE CWM CELYN, BLAINA, AND COALBROOK VALE IRONWORKS.

BRAND C◇C.

MESSRS. FULLER AND HORSEY are instructed to SELL early in May, at the Auction Mart, London (unless previously sold by private contract), the important, extensive, and valuable MINERAL ESTATE known as the—

CWM CELYN, BLAINA, and COALBROOK VALE IRONWORKS,

Situate in the parish of ABERYSTRUTH, in the county of MONMOUTH, with a commodious wharf at the shipping port of Newport.

The Estates include 999A. 0R. 22P. of MINERAL PROPERTY, of which about 1R. 13P. are freehold, and 559A. 3R. 9P. are leasehold, with BLAST FURNACES, FORGES, MILLS, and other necessary machinery, capable of turning out a yearly quantity of 40,000 tons of finished iron; numerous pits for working the minerals, foundries, engineering shops, and timber sawmills, all connected by a complete system of railways, with locomotive-engines, extensive rolling stock, and every other requisite for advantageously carrying on the manufacture of iron, or for the raising of coal for sale purposes. The forges and mills have averaged for six years a yearly make of 39,000 tons of finished iron.

The minerals are well opened and drained, and in quality and quantity equal to any in the district; the coal for steam purposes is unsurpassed.

The brand, or make, of the iron is well known in Great Britain, on the Continent, in the United States, and the Colonies.

The works are distant 20 miles from the shipping port of Newport, and are intersected by the Monmouthshire Railway, affording a direct transit to the ports and also to the inland markets.

The wharf at Newport, held in connection with the works, is most conveniently situate, close to the docks, and a large sum of money has been expended upon it so as to render it one of the best wharves at the port.

More detailed advertisements will shortly appear, and particulars obtained on application to Mr. FREDERICK LEVICK, Blaina Ironworks, near Newport; Messrs. FREDERICK LEVICK and Co., 4, Charlotte-row, Mansion House, London, E.C.; Messrs. QUILTER, BALL, and Co., 3, Moorgate-street, London, E.C.; Messrs. SECRETAN WOODHOUSE and COLBORNE, Solicitors, Newport, Monmouthshire; or Messrs. FULLER and HORSEY, Billiter-street, London, E.C.

EIGHT HUNDRED AND FIFTY TONS PUDDLED BARS, suitable for Armour-plates, and TWO HUNDRED TONS old double-headed RAILS.

MESSRS. FULLER AND HORSEY are instructed to SELL BY TENDER, in one or more lots, 850 TONS WELSH PUDDLED BARS in various sizes, and 200 TONS DOUBLE-HEADED RAILS, now lying on the wharf on the Thames, where the iron may be viewed by orders, which, with specifications and forms of tender, may be had at Messrs. FULLER and HORSEY'S offices, 13, Billiter-street, London, E.C. Payment to be made in cash. Tenders will be received and opened, and the purchaser declared, at the offices of Messrs. FULLER and HORSEY, 13, Billiter-street, E.C., on Thursday, the 18th of April next, at Twelve o'clock precisely. The vendors do not bind themselves to accept the highest or any tender.

GLAMORGANSHIRE.

FOR SALE, BY AUCTION, at the Angel Hotel, Cardiff, on Tuesday, the 2d April next, at Three o'clock precisely in the afternoon, the COLLIERY known as—

COED-CAE-DURRIS COLLIERY,

Situate in the parish of EGLWYSILAN, in the county of GLAMORGAN, within nine miles of the Port of Cardiff, having convenient access to the Rhymney Railway and the Glamorganshire Canal.

The property, which contains a total area of 299A. 3R. 9P., is held for the expired residue of a term of forty-five years, commencing from the 25th March, 1858, at moderate royalties and certain rent. The colliery is believed to be the valuable Llantwit seams of the district, the upper vein having been almost won and worked.

The lease may be inspected by intending purchasers, and all further particulars obtained on application to Mr. R. W. WILLIAMS, Solicitor, Cardiff.

THE MOLLAND MINE AND PLANT, TO BE SOLD BY TENDER.—The mine is situated about eight miles from South Molton and twenty miles from Barnstaple. The PLANT consists of a STEAM-ENGINE and BOILER, pitwork, water-wheel, and crusher, and everything necessary for carrying on the mine. The mine embraces three copper lodes. The one on which operations have been conducted is a strong, large, masterly, and promising lode, from which hundreds of tons of ore have been raised. The mine is drained to the lowest point from surface. At the bottom level the lode is large and regular, presenting a promising appearance, and has produced many tons of fine grey ore. It only requires a small additional capital to sink the mine to a depth at which the Bampfylde Mine became rich. The Bampfylde Mine is in the same district, and worked on parallel lodes to the north-west. The composition of the lodes in both mines is similar. The latter mine is worked by a Liverpool company, and is about 120 fms. deep from surface. The sales during the year 1866 were 418 tons, at an average price of £12 per ton. It is now a regular dividend-paying mine.

Further particulars may be obtained from Captpt. BENNETTS, South Molton, by whose permission the mine may be inspected, and to whom tenders must be addressed on or before Saturday, 13th April next.—March 18, 1867.

LEAD MINES TO LET.—The ELLERTON MOOR LEAD MINES, situate in the parish of DOWNHOLM, near RICHMOND, YORKSHIRE, TO LET, for a term of years.—Apply to "J. S. W. S.," E. Draz, Esq., Charboro' Park, Blandford, Dorset.

PEMBROKESHIRE—CAPITAL SLATE AND SLAB QUARRIES.

TO BE LET, OR SOLD, with immediate possession, the VALUABLE SLATE AND SLAB QUARRIES, situate at SUMMARY HILL, LITTLE NEWCASTLE, near HAVERFORDWEST, which have for years produced slate of the best blue and grey colours, of such superior quality as to establish a reputation throughout the southern districts.

The quality of the slate is equal to any produced by the North Wales quarries. The prevailing colour is blue, but there are also grey and blue grey, and the whole is of a pure, compact, rich metal, capable of being converted into goods of the first-class.

A moderate capital only is required to work the quarries, which are favourably situated six miles from Fishguard, the same from the Clarbaston station on the South Wales Railway, and the proposed continuation of the Manchester and Milford lines is to pass within an easy distance.

For further particulars, apply to M. BRITTAN and SONS, or BARNARD, THOMAS, and Co., both of Bristol.

FOR SALE, and may be seen at the Ashburton Mines, ONE 56 in. PUMPING ENGINE, with TWO 11 ton CORNISH made BOILERS; ONE 40 in. PUMPING ENGINE, only made a short time, and as good as new, with an 11 ton BOILER. A 24 in. WHIM ENGINE, with stamps attached. ONE 11 ton BOILER. Several WATER-WHEELS of various sizes, one with a very excellent drawing machine attached. Pumps and materials of all sorts and sizes.—Application may be made to Mr. W. MATHEWS, engineer, Tavistock, who can be seen on application to people in charge of the mine.

STEAM ENGINE.—FOR SALE, a 60 in. PUMPING ENGINE, equal beam, 10 ft. stroke, with TWO 10 ton BOILERS. This engine is by Messrs. Nicholls and Co., of the Bedford Foundry, Tavistock, and is the same 60 in. engine for sale in Cornwall or Devon.—For further particulars, apply to Mr. JAMES HICKEY, 22, Austinfriars, London.

STEAM-BOILERS made by WILLIAM WILSON, LILYBANK BOILER WORKS, GLASGOW, on the most improved principles, for home and export. All boilers made of the best material and workmanship, proved and warranted tight under a high pressure, and delivered at any railway station or shipping port in the kingdom at moderate rates. Lithograph of boilers forwarded post-free on application.

PUMP-LIFTS.—TO MINING COMPANIES, AND OTHERS.—The EXECUTORS of JESSE VARLEY, BROOKFIELD FOUNDRY, ST. HELEN'S, LANCASHIRE, having PATTERNS for all sizes of PUMP-LIFTS, and being specially PREPARED for their MANUFACTURE throughout, are in a position to supply them at reasonable prices, and with speed.

Estimates for the lifts complete, or price per cwt. for the pump trees also, forwarded on application.

BASTIER'S CHAIN PUMP.—This patent pump is the MOST EFFICIENT in existence for LIFTING ANY QUANTITY of WATER from ANY DEPTH. One lifting from a depth of 170 ft. may be seen at work daily, on application to the

SOLE LICENSEES,

MESSRS. J. JACKSON AND CO., ENGINEERS, 17, GRACECHURCH STREET, LONDON, E.C.,

Who SUPPLY PUMPS and LICENCES.

Communications to Mr. Bastier, the patentee, to be sent to the same address.

AGENT FOR THE COUNTIES OF NORTHUMBERLAND AND DURHAM, YORKSHIRE, DERBYSHIRE, AND NORTH STAFFORDSHIRE,

MR. THOMAS GREENER, MINING OFFICE, NORTHGATE, DARLINGTON.

AGENTS FOR SCOTLAND,

MESSRS. P. and W. MACLELLAN, 127 and 129, IRONGATE, GLASGOW.

ROBERT LIBBY AND SON, MINE AND SHAREDEALERS, CAMBORNE, CORNWALL.

NEXPLOSIVE BLASTING POWDER

(Invented by G. A. NEUMEYER)

NNOT EXPLODE WHEN EXPOSED TO AIR!

L INTERESTED IN COLLIERY, MINING, AND ENGINEERING OPERATIONS are invited to TEST this NEW INEXVE COMPOUND, which meets with great favour upon the Continent, has been in use for some time past.

owder combines STRENGTH with SAFETY to a degree never before known e economical than ordinary blasting-powder:—

ause it is cheaper in first cost.

is lighter than the blasting-powder now in use.

ith same bulk (which is less weight) more effect is produced.

EN H. NEWBY is now prepared to register orders for the above. Parpost free, on application to the offices, No. 39A, KING WILLIAM T, CITY, LONDON.

JOHN AND EDWIN WRIGHT,

PATENTEES.

(ESTABLISHED 1770.)

MANUFACTURERS OF EVERY DESCRIPTION OF IMPROVED

PATENT FLAT AND ROUND WIRE ROPES,

From the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES.

RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE, TARPAULING, OIL SHEETS, BRATTICE CLOTHS, &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.
UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM.
No. 2, OSWALD STREET, GLASGOW.
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GLAHOLM AND ROBSON,

HENDON PATENT ROPERY, SUNDERLAND,

MANUFACTURERS of ALL DESCRIPTIONS of STEEL IRON, and HEMP ROPES for COLLIERIES, SHIPS, &c.

Swan Rope Works.

GARNOCK, BIBBY, AND CO.,

CHAPEL STREET, LIVERPOOL,

MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.
MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER and THIRTY PER CENT. CHEAPER than Russian hemp rope.
WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of STRENGTH.

PATENT FLEXIBLE TUBING

AND BRACTICE CLOTH FOR MINES,

MANUFACTURED BY

ELLIS LEVER,

PATENTEE,

WEST GORTON WORKS, MANCHESTER.

TO COLLIERY PROPRIETORS.

BEST CHARCOAL IRON AND STEEL WIRE ROPES,

Also HEMP ROPES, for MINING PURPOSES.

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WEST GORTON WORKS, MANCHESTER.

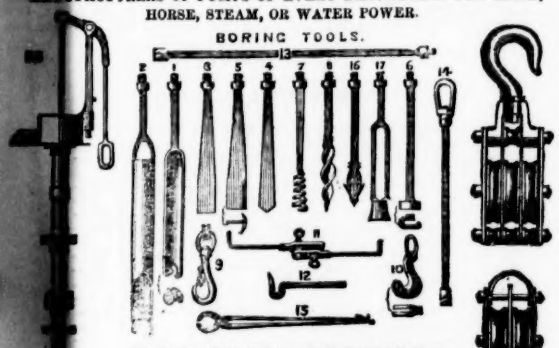
S. OWENS AND CO. (LATE CLINTON AND OWENS),

WHITEFRIARS STREET, FLEET STREET, LONDON, E.C.,

HYDRAULIC AND GENERAL ENGINEERS,

MANUFACTURERS OF PUMPS OF EVERY DESCRIPTION FOR HAND, HORSE, STEAM, OR WATER POWER.

BORING TOOLS.



BORING TOOLS OF ALL DESCRIPTIONS, for Testing Ground and for Artesian Wells.

PORTABLE, SINGLE, and DOUBLE BARREL, and other PUMPS, and PORTABLE STEAM ENGINES.

CRABS, CRANES, PULLEY BLOCKS, and HOISTING TACKLE.

ANY OF THE ABOVE CAN BE HAD ON HIRE OR PURCHASE.

Full information, Drawings, Price Lists, &c., relating to the above, and to Hydraulic Machinery of all descriptions—Crabs, Pulleys, Blocks, and Hoisting Tackle of superior manufacture—may be had on application.

BICKFORD'S PATENT SAFETY-FUSE OBTAINED the PRIZE MEDALS at the ROYAL EXHIBITION of 1851, at the INTERNATIONAL EXHIBITION of 1862, in London, and at the IMPERIAL EXPOSITION held in Paris, in 1865.

BICKFORD, SMITH, AND CO., of TUCKINGMILL, CORNWALL, MANUFACTURERS of PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—

EVERY COIL of FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.

THE CORNWALL BLASTING POWDER COMPANY,

ST. ALLEN GUNPOWDER MILLS, TRURO,

MANUFACTURERS OF PATENT BLASTING POWDER, ORDINARY GUNPOWDER, AND WATERPROOF SAFETY BLASTING CARTRIDGES.

THE CORNWALL BLASTING POWDER COMPANY SOLICIT PARTICULAR ATTENTION to their PATENT BLASTING POWDER, which has been fully tested by time, and the growing estimation in which it is held by working men proves its great superiority over ordinary gunpowder.

It possesses the following advantages:—

STRENGTH being about TWENTY-FIVE PER CENT. LESS than ORDINARY GUNPOWDER, and EQUAL in STRENGTH, bulk for bulk, an IMPORTANT SAVING is EFFECTED on the score of CONSUMPTION.

Explosion, on explosion, only about ONE-HALF as much SMOKE as ORDINARY GUNPOWDER, and this smoke being of a lighter nature soon passes away, and an IMPORTANT SAVING is thus EFFECTED on the score of TIME.

It is ADAPTED to ANY CLIMATE, DOES NOT BECOME WASTEFUL by EXPOSURE to the ATMOSPHERE, is NOT MORE DANGEROUS in use than ORDINARY GUNPOWDER.

Testimonials forwarded on application.

NITRO-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.

—The EXPLOSIVE FORCE of this BLASTING OIL is TEN TIMES that of GUNPOWDER, and the ECONOMY and SAVING in TIME, LABOUR, and COST in removing granite and hard rock, in sinking shafts, driving tunnels, and opening forward in close ends is immense.

It cannot explode from a spark or fire, but from concussion alone, and is consequently much less dangerous than gunpowder or gun-cotton.

Being heavier than water it sinks to the bottom of a wet hole, no other tamping water being required.

The charge of this blasting oil, which is now being used with wonderful effect in the largest slate quarries in North Wales, will displace as much slate rock as four or five charges of gunpowder; and its great force, acting on a large surface of good slate rock, shakes and displaces it at the natural joints, or fissures, without damaging the slabs nearly so much as the more numerous holes which any other blasting material would do.

This invaluable quarrying agent may now be obtained from Messrs. WEBB and Co., Carnarvon, sole consignees from the patentee.

IMMENSE SAVING OF LABOUR.

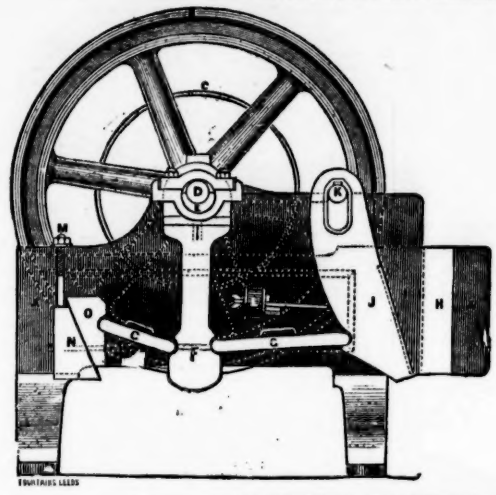
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, McADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER,

OR ORE CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour
For the Parys Mining Company,
H. R. Marsden, Esq. JAMES WILLIAMS.

Ecton Emery Works, Manchester.—We have used Blake's patent stone breake made by you, for the last 12 months, crushing emery, &c., and it has given ever satisfaction. Some time after starting the machine a piece of the moveable jaw about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws the machine to the size fixed for crushing the emery.
H. R. Marsden, Esq. THOS. GOLDSWORTHY & SONS.

Alkali Works, near Wednesbury.—I at first thought the outlay too much to simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly,—The stone breaker does its work admirably, crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust. Messrs. ORD and MADDISON,
Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton.
JOHN LANCASTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS.

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or $75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered third machine for this estate. SILAS WILLIAMS.

For circulars and testimonials, apply to—

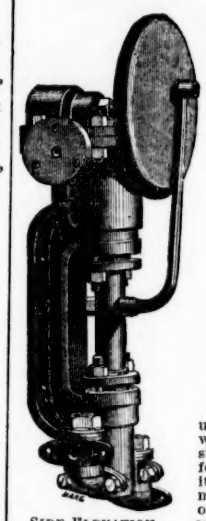
H. R. MARSDEN, SOHO FOUNDRY,

MEADOW LANE, LEEDS,

ONLY MAKER IN THE UNITED KINGDOM.

THE NEW PATENT INJECTOR,

FOR FEEDING BOILERS AND RAISING WATER FOR OTHER PURPOSES.



SIDE ELEVATION.

[SPECIFICATION.]

This injector is a steam-pump, constructed on a principle entirely new and of great simplicity. The crank-shaft and fly-wheel are of small size, and the slide-valve is worked inside the steam chest by means of a steel crank and friction roller, thus dispensing with eccentric, rod, and straps. All the working parts are made of steel, hardened and polished. The cylinder and pump are in one casting, and bored throughout the body of the pump as well as the stuffing-box. The pump-ram is of the best gun-metal, being cast in one piece with the piston and piston-rod, and fitted accurately to the bored body of the pump, thus ensuring a nearly perfect vacuum in pumping. The stuffing-box glands are also of gun-metal polished. The valves and boxes are of the best gun-metal, the valves being of the spherical description, the covers fitted with brass cages, and the joints faced metal to metal. The slide-valve is of hard bell-metal. The steam-chest, with cylinder end, is in one piece, and may be removed without disturbing either steam or exhaust pipes. The whole engine may be taken to pieces and put together under steam in fifteen minutes, without disturbing any pipes whatever.

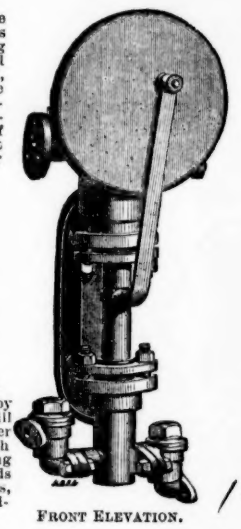
PRICES, DELIVERED IN LONDON:—

[Size. No.	Ram. in.	Stroke. in.	Approx. h.p. boiler supplied.	Approx. gallons thrown per hour. At 100 rev.	150 rev.	200 rev. p. min.	Price.
4	1½	3	15	115	172	230	£10 10
5	1⅞	3	22	180	270	360	12 12
6	1⅞	4	30	240	360	480	14 14
7	2¼	4	40	345	517	690	17 0
8	2¼	5½	55	475	712	950	19 10
9	2½	5½	75	585	877	1170	22 10
10	2½	6¾	90	720	1080	1440	25 10
11	2¾	6¾	110	870	1305	1740	28 10
12	2¾	8	120	1030	1545	2060	31 10

Terms: Nett Cash on Delivery.

All guaranteed to work efficiently, and any one failing to give entire satisfaction may be at once returned.

This injector will force water at or under a temperature of 212° Fahr. It will draw water 15 ft., or by using one size larger than required for forcing the quantity, it will draw from a depth of 30 ft. It will work with a pressure of steam of 15 lbs. per square inch; to work at a lower pressure the next larger size must be used, which is made with a reduced ram. This instrument will not become encrusted through forcing bad water, and it will force semi-fluids. Any unskilled labourer may work it, and after starting it requires no attention. The ordinary speed of working is 150 revolutions per minute, but higher speeds may be used without harm to the engine. Larger sizes, and special pumps for throwing water into tanks, or for use as fire-engines, can be made in a few days. A circular, with full explanation and comparisons, will be sent on application.



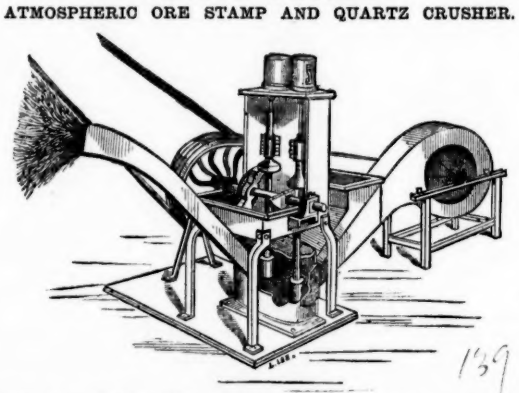
FRONT ELEVATION.

BROWN, WILSON, AND CO.,

80, CANNON STREET, E.C.; AND VAUXHALL IRONWORKS, LONDON, S.

CHILDS' PATENT

ATMOSPHERIC ORE STAMP AND QUARTZ CRUSHER.

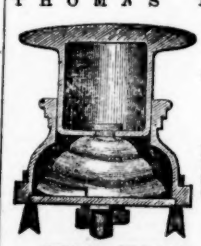


THIS is an IMPROVED STAMP, and will give as many blows per minute as an ordinary 10-stamp mill, and of far greater force, giving an effective blow of from 150 to 200 tons per minute, and will crush any known ore to an impalpable powder, saving every particle of the product for future operations,—a result not before obtained by any stamping process. Greater economy is combined than by any other known method. The patentee has erected a machine near his office, where he invites (by appointment) experienced and practical miners, engineers, chemists, metallurgists, and all others interested, to inspect its results. Every facility will be given for experiments upon different ores, and all other substances to be crushed.

For particulars, address— A. B. CHILDS,

No. 48, NEW OXFORD STREET, LONDON, W.C.

THOMAS TURTON AND SONS,



MANUFACTURERS OF

CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.

CAST STEEL PISTON RODS, CKANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and FORGINGS of EVERY DESCRIPTION.

DOUBLE SHEAR STEEL, BLISTER STEEL, SPRING STEEL, GERMAN STEEL,

FILES MARKED T. TURTON. EDGE TOOLS MARKED WM. GREAVES & SON.

Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.

LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C., Where the largest stock of steel, files, tools, &c., may be selected from.

CREASE'S NEW AND IMPROVED PATENT BORING MACHINE.—In consequence of the various and IMPORTANT IMPROVEMENTS that an experience of several years has enabled the inventor to introduce into these machines, he can with the most perfect confidence recommend them for their increased DURABILITY, SIMPLICITY, ECONOMY, and SPEED to be attained by their adoption in DRIVING LEVELS or DRIFTS.

The inventor has made arrangements to supply them in any quantity, with warrantry. Orders executed according to their date of priority.

Address, EDWARD S. CREASE, Tavistock, Devon.

PRENTICE'S GUN COTTON

COMPRESSED CHARGES

FOR MINING AND QUARRYING.

The principle thus introduced insures the most perfect attainment of the points essential for the safety and stability of the material, at the same time securing the highest effective power.

A charge of any given size exerts six times the explosive force of gunpowder.

The enormous power confined in a short length at the bottom of the hole allows of a much greater amount of work being placed before each blast, saving considerably in the labour of drilling.

Charges are made of every diameter required, the length varying with the diameter. Any number may be placed in a hole. Each charge is fully equal to one-fifth of a pound of powder.

PRICES.

Per case, containing 500 charges of any diameter ..... 35s.
Per half case, containing 250 charges of any diameter ..... 18s.
Per quarter case, containing 125 charges of any diameter .... 9s.

Terms,—cash.

MANUFACTURED BY

THOMAS PRENTICE AND CO., 173, FENCHURCH STREET, LONDON. WORKS, STOWMARKET.

BAGILLT OIL COMPANY (LIMITED)

FLINT.

MANUFACTURERS OF BLACK GREASE

FOR COLLIERY WIRE ROPES, TRAMS, WAGONS, &c., £5 PER TON.

TORCH AND LAMP OIL, 1s. PER GALLON (Casks free).

LUBRICATING OIL, 1s. PER GALLON (Casks free).

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764.)

Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland.

NERVOUS DEBILITY: ITS CAUSE AND CURE.—Before seeking aid from the so-called remedies without medicine, read this valuable work on the Treatment and Cure of Nervous and Physical Debility, Loss of Appetite, Pains in the Back, Spermatorrhœa, &c., with Plain Directions for Perfect Restoration to Health. Sent post free to any address, on receipt of two postage stamps. Letters of enquiry or details of case promptly answered.

Address, Dr. SMITH, 8, Burton-crescent, London, W.C.

DR. WATSON (of the Lock Hospital), F.R.A.S., Member of the College of Physicians and Surgeons, on the SELF-CURE of NERVOUS and PHYSICAL DEBILITY, Lowness of Spirits, Loss of Appetite, Timidity, Incapacity for Exertion, &c., with mean for perfect restoration. Sent free for two stamps by Dr. WATSON, No. 1, South-crescent, Bedford-square, London Consultations daily from 11 till 3, and 6 till 8; Sundays, 10 till 1.

Just published, post free for two stamps,

WONDERFUL MEDICAL DISCOVERY, demonstrating the true causes of Nervous, Mental, and Physical Debility, Lowness of Spirits, Indigestion, Want of Energy, Premature Decline, with plain directions for perfect restoration to health and vigour, WITHOUT MEDICINE. Sent free on receipt of two stamps, by W. HILL, Esq., M.A., Berkeley House, South-crescent, Russell-square, London, W.C.

CONSULT DR. HAMMOND (of the Lock Hospital, &c.), No. 11, Charlotte-street, Bedford-square, London, W.C., in all those ailments which tend to embitter and shorten life, and especially those termed peculiar and confidential. At home, Nine to Two, and Six to Eight; Sundays, Ten to Twelve The "Self-Curative Guide" post free, two stamps.

N.B.—Cases of recent infection cured in two days.

CURE YOURSELF BY THE PATENT SELF-ADJUSTING CURATIVE AND ELECTRIC BELT.—Sufferers from nervous debility, painful dreams, &c., can now cure themselves by the only guaranteed remedy in Europe, protected by Her Majesty's great seal. Free for one stamp by H. JAMES, Esq., Percy House, Bedford-square, London.

N.B.—Medicines and fees superseded.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
500	Alderley Edge, c, Cheshire*	10 0 0	—		8 12 8	0 5 0	Jan. 1867
200	Botallack, t, c, St. Just	91 5 0	—		488 15 0	5 0 0	May, 1866
10000	British Slate Company	10 0 0	—		9 per cent.		Sept. 1866
4000	Brookwood, l	1 11 0	—		0 5 0	0 2 6	Sept. 1866
1000	Bronfloyd, l, Cardigan*	12 0 0	—		8 7 0	0 6 0	Aug. 1866
6400	Cashwell, l, Cumberland*	2 10 0	1		0 1 6	0 1 6	Aug. 1866
916	Cargoll, s-l, Newlyn	15 5 7	—	10 11	13 15 0	1 0 0	Feb. 1866
1867	Cwm Erfin, l, Cardiganshire*	7 10 0	—		21 18 0	1 0 0	Jan. 1867
128	Cwmystwith, l, Cardiganshire	60 0 0	—		376 10 0	4 0 0	Feb. 1867
280	Derwent Mines, s-l, Durham	300 0 0	—		167 0 0	5 0 0	Oct. 1866
1024	Devon Gt. Consols, c, Tavistock†	1 0 0	420	380 390	1054 0 0	6 0 0	Mar. 1867
358	Dolcoath, c, t, Camborne	128 17 6	—		821 10 0	8 0 0	Feb. 1867
6144	East Caradon, c, St. Cleer†	2 14 6	5½	5 5½	14 7 6	0 2 0	Jan. 1867
300	East Darren, l, Cardiganshire	32 0 0	—		138 10 0	2 0 0	Jan. 1867
128	East Pool, t, c, Pool, Illogan	24 5 0	—		392 10 0	2 10 0	Mar. 1867
5000	East Rosewarne, c, t, Gwinear	2 15 0	—		0 10 6	0 1 6	Jan. 1866
1906	East Wheal Lovell, t, Wendron	3 9 0	11	10 11	2 7 6	0 7 6	May, 1866
2800	Foxdale, l, Isle of Man*	25 0 0	—		70 0 0	0 10 0	Mar. 1867
5000	Frank Mills, l, Christow	3 18 6	—		3 5 6	0 5 0	Feb. 1866
15000	Great Laxey, l, Isle of Man*	4 0 0	17½	17 18	6 5 0	0 10 0	Mar. 1867
5908	Great Wheal Vor, t, c, Helston†	40 0 0	22	19½ 20½	11 5 6	0 7 6	Mar. 1867
1024	Herodsfoot, l, near Liskeard†	8 10 0	32		40 10 0	1 10 0	Feb. 1867
6000	Hingston Down, c†	5 10 6	—		0 10 0	0 5 0	April, 1866
400	Lisburne, l, Cardiganshire	18 15 0	—		486 10 0	8 0 0	Jan. 1867
9000	Marke Valley, c, Caradon	4 10 6	4¼	4⅛ 4⅜	3 11 0	0 2 0	Jan. 1867
2000	Minera Boundary, l, Wrexham*	1 0 0	—		0 13 0	0 3 0	Mar. 1866
1800	Minera Mining Co. l, Wrexham*	25 0 0	180	150 160	208 13 0	3 5 0	Feb. 1867
20000	Mining Co. of Ireland, c, l, cl.	7 0 0	—	16½ 16¾	—	0 5 7	Jan. 1867
40000	Mwyndy Iron Ore*†	3 5 0	—		0 6 6	0 2 6	Mar. 1866
—	New Merrybent and Middleton*	3 10 0	—		5 per cent.		Nov. 1866
200	Parys Mines, c, Anglesey*	50 0 0	—		157 10 0	5 0 0	Jan. 1866
6000	Prosper United, t, c, St. Hilary	8 14 0	3¾	3¾ 3⅞	0 5 0	0 5 0	Feb. 1867
1120	Providence, t, Uny Lelant†	10 6 7	35	30 33	82 7 6	0 10 0	Feb. 1867
512	South Caradon, c, St. Cleer†	1 5 0	325	300 320	550 10 0	6 0 0	Mar. 1867
6000	South Darren, l*	3 6 6	—		0 5 6	0 2 6	June, 1866
6000	Tincroft, c, t, Pool, Illogan†	9 0 0	15	15 16	18 11 0	0 5 0	Jan. 1867
3000	W. Chiverton, l, Perranzabuloe†	10 0 0	61	68 70	17 7 6	2 0 0	Feb. 1867
400	West Wheal Seton, c, Camborne†	47 10 0	—	135 140	467 0 0	2 10 0	Feb. 1867
512	Wheal Basset, c, Illogan†	5 2 6	66	65 67½	622 0 0	1 0 0	Oct. 1866
1024	Wheal Friendship, c, Tavistock	20 0 0	—		300 10 0	0 10 0	Nov. 1866
4295	Wheal Kitty, t, St. Agnes	5 4 6	—		3 1 0	0 2 0	Feb. 1867
1024	Wheal Mary Ann, l, Menheniot†	8 0 0	14	12 14	61 0 0	0 12 6	Mar. 1867
2000	Wheal Rose, c, Scorrier	—	10		1 0 0	0 10 0	Feb. 1866
396	Wheal Seton, t, c, Camborne	58 10 0	107½	104 106	239 5 0	3 10 0	Feb. 1867
1040	Wheal Trelawny, s-l, Liskeard†	5 17 0	—		54 10 6	0 5 0	Mar. 1867
7000	Wicklow, c, l, Wicklow	2 10 0	—	24	45 15 0	0 18 0	Oct. 1866

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
5000	Cape Copper Mining*†	7 0 0	7	6½ 7½	2 12 6	0 10 0	April, 1866
100000	Don Pedro No. del Rey, Brazil*†‡	0 14 0	21s.	19s. 21s.	0 2 9	0 2 0	Mar. 1864
25000	Fortuna, l, Spain*†	2 0 0	2½	2 2½	1 5 4	0 2 0	Oct. 1866
70000	English and Australian, c‡	2 10 0	⅞	½ ¾	1 13 0	0 1 0	Feb. 1867
20000	Gen. Mining Assoc., Nova Scotia†	20 0 0	20	18 20	22 0 0	1 0 0	June, 1866
10000	Gonnesa, l.* [5000 £5 pd., 5000 £4 pd.]	—	—		7½ per cent. per annum.		
15000	Linares, t, Spain*†	3 0 0	1½	1 1½	11 6 4	0 5 0	Jan. 1865
30000	Pestarena, g*†	2 0 0	1¾		0 2 6	0 2 6	Mar. 1867
50000	Panulcillo, c*†	3 0 0	—	2 2½	10 per cent.		Yearly.
10000	Pontgibaud, s-l, France†	20 0 0	8½	8 8½	4 3 2	1 3 6	Dec. 1866
100000	Port Phillip, g, Clunes†	1 0 0	⅞	⅝ ⅞	0 16 6	0 1 0	Jan. 1867
120000	Scottish Australian Mining Co.†	1 0 0	1⅛	¾ ⅞	7½ per cent.		Mar. 1867
11000	St. John del Rey, Brazil*†	15 0 0	55	55 56	72 15 0	4 0 0	Dec. 1866
50000	Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]				0 9 0	0 1 0	Jan. 1866
40000	West Canada Mining Company*	1 0 0	—		0 19 6	0 2 6	May, 1865

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos, l, Spain*†	2 0 0	—	⅞ 1⅛	Fully pd.
100000	Anglo-Brazilian, g*†	0 10 0	⅜	¼ ⅜	Nov. 1866
10000	Alten and Quænangen United, c*‡	4 10 0	—		
20000	Australian, c, South Australia†‡	7 7 6	—		
40000	Brittany Silver-Lead Mines, France* [15750 18s. pd.]	—	—		
2464	Burra Burra, c, South Australia‡	5 0 0	—		
25000	Capula, s, Mexico*†	1 12 0	—		Aug. 1866
30000	Chontales, g, s, Nicaragua*†	3 7 6	3	2½ 3	Feb. 1867
12000	Cobre Copper Company, c, Cuba†‡	40 10 0	—		
10000	Copiapo Mining Company, Chili†‡	16 10 0	—		
10000	Copiapo Smelting, Chili*	10 0 0	—		April, 1866
300	Copper Miners' Co. of South Australia* [150 £100 pd., 150 £70 pd.]				Nov. 1866
25000	East del Rey, g, Brazil*†	2 15 0	—		June, 1866
21500	East Indian Coal, Calcutta	10 0 0	—		
15000	El Chico Silver Mining and Reduction Company*	5 0 0	—		Nov. 1866
8000	English and Canadian Mining Company*	5 0 0	—		Fully pd.
50000	Frontino and Bolivia, g, New Granada*†	1 12 6	—		Dec. 1866
80000	Great Northern, c, South Australia†	1 11 6	—		Sept. 1862
10000	Great Barrier Land, Mining, &c., New Zealand	5 0 0	—		Fully pd.
68000	Kapunda Mining Co., Australia†‡	1 0 0	—		
7927	Lusitanian (Portugal)†‡	3 0 0	—		
83090	Mariquita	0 12 6	—		Jan. 1867
12500	Nerbudda Coal and Iron*† [6000 £5 pd., 6500 £4 pd.]	—	5	4 5	Aug. 1865
50000	Nova Scotia Land and Gold*	1 15 0	—		Sept. 1865
15000	Otea, c, New Zealand* [5000 fully paid]	1 10 0	—		April, 1866
6000	Peel River Land and Mineral*†	100 0 0	38	35 38	Stock.
51000	New Quebrada, c, Venezuela*†	3 10 0	—		
10178	Rhenish Consolidated, l [6000 £5 pd., 4178 £2 10s. pd.]	—	—		May, 1866
50000	Rossa Grande, g, Brazil*	0 10 0	—		Mar. 1867
15000	San Pedro del Monte, s, Mexico*	4 0 0	—		Sept. 1866
10000	San Roque, l, Spain	5 0 0	—		Fully pd.
1000	Schlossberg Colliery*	10 0 0	—		
43174	United Mexican, s, Mexico†‡	28 5 0	2⅞	2¾ 3	
10000	Vancouver, cl*†‡	6 0 0	3	2 3	
30000	Val Antigoria, g*†	0 17 6	—		July, 1866
6000	Val Sassam, s, c, l*†	6 10 0	—		Jan. 1867
5000	Valgodemard Mining Company*	20 0 0	—		Fully pd.
50000	Vallanzasca, g, Italy*†	0 17 6	—		July, 1866
45000	Victor Emanuel, c, Italy*	1 0 0	—		Fully pd.
20000	Washoe, g†	5 0 0	1	⅛ 1	Fully pd.
80000	Worthing, c, South Australia*†	1 0 0	⅝	⅜ ⅝	Fully pd.
75000	Yorke Peninsula, South Australia	1 0 0	—		Fully pd.
45000	Yudanamutana, c, S. A.*†‡	3 0 0	1⅛	[illegible] 1	

BANKS AND FINANCIAL COMPANIES.

Shares.	Banks.	Paid.	Last Pr.	Bus. done.
40000	Alliance*†	25 0 0	16	15¼ 15½
40000	Australian Mort. Land and Finance†	5 0 0	5½	5 5½
30000	Australasia†	40 0 0	66	62 64
10000	Bank of Egypt†	25 0 0	34	32 34
50000	Bank of New Zealand†	10 0 0	19	18 19
25000	Bank of Otago*†	10 0 0	6½	5½ 6½
20000	Bank of Victoria, Australia†	25 0 0	39	37 39
20000	British North American†	50 0 0	50	49 50
8915	Canada Company†	32 10 0	72	69 71
50000	Canadian Loan and Investment*†	2 10 0	—	
40000	Chartered Bank India, Australia, and China†	20 0 0	16½	16 17
30000	Chartered Merc. of India, London and China†	25 0 0	32	30 31
50000	City†	10 0 0	14	11 13
20000	Colonial†	25 0 0	37	35 37
40000	Company of African Merchants.*†	3 0 0	3	2½ 3
150000	Consolidated Bank*†	4 0 0	4⅝	4⅜ 4⅝
50000	ditto New*†	3 0 0	3⅜	3¼ 3½
200000	Credit Foncier and Mobilier of England*†	9 0 0	3	2⅝ 2⅞
20000	East London*†	5 0 0	3½	2¾ 3½
30000	English, Scottish, & Aust., Chart.†	20 0 0	17½	16 17
20000	English and Swedish*†	25 0 0	15	14½ 15½
20000	Imperial Bank*†	20 0 0	24	22 24
202500	Imperial Ottoman†	10 0 0	8¾	8¼ 8¾
150000	International Financial Society*†	5 0 0	2⅝	2⅜ 2⅝
300000	International Land Credit*†	6 0 0	4	3 4
50000	London Chartered Bank of Australia†	20 0 0	23	22 23
37500	London and County†	20 0 0	57	56 58
40000	London Financial Association*†	25 0 0	7½	6½ 7
72000	London Joint-Stock†	15 0 0	42	40 42
5000	London and River Plate*†	40 0 0	45	43 45
20000	ditto ditto New, issued at 1½ prem.*†	10 0 0	11	10 11
20000	ditto ditto New*†	10 0 0	11	10 11
10000	London and South-Western*	20 0 0	19	18 19
5000	London and Venezuela*†	12 10 0	—	
50000	London and Westminster†	20 0 0	94	92 94
50000	Mercantile and Exchange*†	12 10 0	5½	3 5
10000	Merchant*†	25 0 0	17	16 17
5000	ditto New*†	20 0 0	11	9 11
17156	Metropolitan and Provincial*†	20 0 0	9	7¼ 8¼
5000	Midland*†	20 0 0	19½	18½ 19½
20000	National of Australia†	4 0 0	6	5 6
20000	National of Liverpool*†	15 0 0	15½	13½ 14½
10000	National Provincial of England†	42 0 0	—	
55000	ditto ditto 2d and 3d issue†	12 0 0	—	
40000	National†	30 0 0	65	63 65
50000	New South Wales†	20 0 0	46	44 46
60000	Oriental Bank Corporation†	25 0 0	42	40 42
27210	Provincial Banking Corporation*†	10 0 0	4	3 4
20000	Provincial of Ireland†	25 0 0	85	83 85
10000	ditto ditto New†	10 0 0	—	
40000	Union of Australia†	25 0 0	48	46 48
10000	Union of Ireland*†	22 0 0	14	12 13
80000	Union of London†	15 0 0	44½	43 44

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4000	Ballacorkish, I. of Man, l, c*	2 0 0	—		Jan. 1867
3000	Bedford Unit., c, Tavistk.*	2 6 8	—		
3200	Bedol Aur, l, Holywell	1 7 0	—		Nov. 1866
500	Billins, l, Flint	30 0 0	—		Fully pd.
1248	Boscaswell, t, c, St. Just	7 6 0	—		Dec. 1866
5000	Bottle Hill, t, Plympton	1 14 6	—		June, 1866
200	Brynford Hall, l, Flint	28 0 0	—		Jan. 1866
500	Bryn Gwiog, l, Flint	9 0 0	20	16 18	June, 1864
1200	Bryn Gwyn, l, Mold*‡	9 0 0	—		
1000	Budnick Consols, c, t	—	—		
30000	Caldbeck Fells, l, Cumber.*	1 10 0	—	⅝ ⅞	Dec. 1866
1000	Camborne Consols, c	18 10 0	—		Feb. 1864
4600	Camborne Vn.&Wh.Frn., c	11 12 1	¾		Mar. 1867
11000	Cape Cornwall, t, c* [8000 £2 10s. pd., 3000 10s. pd.]				Oct. 1866
914	Caradon Cons., c, St. Cleer	32 3 6	—		Feb. 1867
1000	Carn Brea, c, t, Illogan‡	25 0 0	14	11 13	Nov. 1866
6000	Carn Camborne, c, Cambn.	2 1 0	—		Jan. 1867
5000	Carnarvonshire, l*	4 0 0	—		Fully pd.
4005	Cardigan Cons.* [1000 £5 pd., 3005 £4 5s. pd.]				April, 1866
600	Cardiganshire, l*	17 10 0	—		Sept. 1866
20000	Carysfort [3200 £2⅛ pd., 16800 £1⅜ pd.]				Mar. 1865
2500	Cefn Cilcen, l, Flint*	2 18 0	—		Aug. 1866
2500	Central Minera, l*	3 12 6	—		Nov. 1866
16000	Central Snailbeach l*	1 0 0	—		Fully pd.
3000	Chiverton, l, Perranzabu.	9 5 0	7¾		Feb. 1867
3000	Chiverton Moor, l, Perranz.	6 3 6	7⅞	5⅛ 5⅝	Feb. 1867
2000	Chiverton Wheal Hope, l	—	—		
4000	Clara, Llywernog	2 6 0		2	
2880	Clifford Amalg., c, Gwen.‡	32 0 0	7¼	6½ 7	
256	Condurrow, c, t, Camborne‡	76 10 0	17	15 17	
5000	Connorree, c, sul, Wicklow*	1 0 0	—	13s 6d	Fully pd.
2450	Cook's Kitchen, c, Illogan‡	19 14 9	13	11 12	July, 1866
1024	Copper Hill, c, Redruth‡	12 10 0	—		June, 1866
6885	Cornish Clay and Tin	1 0 0	—		Fully pd.
1055	Craddock Moor, c, St. Cleer‡	11 19 0	—		Mar. 1867
861	Crane, c, Camborne	33 9 6	—		Dec. 1866
12000	Crelake, c, Tavistock	3 8 0	—		July, 1866
6000	Cuddra, t, St. Austell	5 0 0	—		Oct. 1866
35000	Dale, l, North Stafford	1 0 0	—		Fully pd.
1000	Darren, l, Cardigan*	12 4 0	15	13 15	Oct. 1866
5000	Devon Great Maria*	7 0 0	—		May, 1866
4000	Devon Wheal Frances, c	1 5 9	—		Mar. 1867
12800	Drake Walls, t, Calstock‡	2 5 0	¾	½ ¾	Dec. 1866
656	Ding Dong, t, Gulval‡	49 14 6	—		Dec. 1866
20000	Dolfrwynog, g*	0 15 0	—		June, 1864
25000	Dundalk, Ireland, l*	0 15 0	—		Feb. 1867
3000	Dyfngwm, l, Wales	13 7 0	—		June, 1866
740	Eaglebrook, l*	19 15 0	—		July, 1866
512	East Basset, c, Redruth†‡	29 10 0	22	18 20	
1000	East Basset and Grylls, t	3 5 0	—		July, 1865
6000	E. Bottle Hill, t, Plympton	0 8 6	½	8s. 10s.	Dec. 1866
4096	East Brookwood, Holne	2 8 8	—		July, 1866
6000	E. Carn Brea, c, Redruth‡	3 15 0	2¾	2½ 2¾	
4000	East Chiverton, l, Perranz.	2 11 9	2		Mar. 1867
6000	E. Grenville, c, Camborne	3 6 6	2½	2¾ 3	Feb. 1867
4000	E. Gunnislake & S. Bed. c.	9 4 6	—		Mar. 1867
6000	East Laxey, l, Isle of Man*	2 10 0	—		Dec. 1865
1000	East Moor, s	0 5 0	—		Aug. 1866
3986	E. Providence, t, Uny Lel.	5 1 9	—		Feb. 1867
6000	East Snaefell, l, I. of Man*	2 0 0	—		Dec. 1864
5610	East Seton, c, Camborne	0 11 0	⅝		Oct. 1865
9000	E. St. Just, t* [6000 £3 10s. pd., 3000 £1 10s. pd.]				Nov. 1866
256	East Tolgus, c, Redruth	96 0 0	—		April, 1866
1190	E. Wh. Agar, c, St. Cleer	12 17 0	—		Jan. 1865
4000	E. Wh. Russell, Tavistock†	11 16 6	3⅝	3 3¼	Jan. 1867
6000	Fortescue Consols, c	0 12 6	—		
940	Fowey Con., c, Tywardreath‡	5 4 6	—		Feb. 1867
6000	Furze Hill Wood Con. Buckl.	1 16 0	—		Feb. 1866
10000	Fursdon, c* [5000 £1 10s.]	—	—		Mar. 1865
4096	Garlidna Unit., t, Wendron	5 7 7	—		Feb. 1866
4000	Gawton, c, Tavistock	3 5 6	3	2½ 3	Feb. 1866
6000	Gen. Min. Co. for Ireland, c	4 0 0	—		
40000	Glasgow Caradon c* [30000 £1 pd., 10000 10. pd.]				Sept. 1866
6144	Gonamena, c, St. Cleer	5 18 0	—		Feb. 1867
6000	Gothic, s-l, Cardigan*	2 10 0	—		Fully pd.
486	Grambler and St. Aubyn†‡	71 0 0	5	4¼ 4¾	Mar. 1867
4096	Great Caradon, c, St. Ive	3 13 0	—		Feb. 1867
3000	Gt. East Lovell, t, Helston	2 1 0	—		Nov. 1866
5000	Great Mona, l, Isle of Man*	3 10 0	—		June, 1866
5000	Great North Downs, c	6 13 0	4¼	3½ 4	Feb. 1867
12500	Gt. No. Laxey (Isle of Man)*	0 12 6	1½	1¼ 1½	Jan. 1867
4800	Great Retallack, s-l, b	1 19 0	3⅛	3 3½	Jan. 1867
6000	Great South Chiverton, s-l.	1 12 6	—		Jan. 1867
6000	Gt. So. Tolgus, c, Redruth.	0 19 6	⅝	⅝ ¾	Aug. 1866
3313	Great Wheal Baddern, t	7 17 6	—		June, 1863
1798	Gt. Wh. Fortune, t, Breage	27 14 6	5		Mar. 1867
119	Great Work, t, Germoe	100 0 0	—		
10240	Gunnislake (Clitters'), t, c.	4 15 0	—		Aug. 1866
6068	Gwydyr Park, l, Llanrwst	1 13 0	—		Nov. 1866
6000	Hallenbeagle, c, Kenwyn	2 13 0	—		Nov. 1866
6400	Harwood, l, Durham*	0 6 0	⅝	⅝ ¾	Sept. 1864
5000	Havan, l, Cardigan*	4 15 0	—		Mar. 1866
305	Injebreck and Garrahan*	1 0 0	—		
6000	Illogan, t, c	0 19 6	—		June, 1866
6000	Lady Bertha, c, Tavistock.	4 1 0	—		Jan. 1866
3000	Leawood, c, l, Lydford	3 3 6	—		June, 1866
1019	Leeds and St. Aubyn, t, c	19 13 4	—		Mar. 1866
160	Levant, c, t, St. Just	10 8 1	—		June, 1866
6000	Levant United, St. Just‡	0 10 0	—		
1024	Lovell Consols, t	—	3½	3 3½	
3000	Maes-y-Safn, l*	20 0 0	—		Jan. 1866
6000	Maudlin, c, Lostwithiel	4 7 0	—		May, 1865
5000	Merllyn, l, Flint	3 15 6	—		Jan. 1866
640	Mount Pleasant, l, Mold	4 0 0	—		
1024	Nangiles, t, c, Kea	27 5 0	—		Feb. 1867
250	Nanty Mines, l, Montgom.	30 0 0	—		Aug. 1866
12800	Nether Hearth* [6400 £1 pd., 6400 2s. pd.]			⅛ ⅜	
6000	New Birch Tor & Vitifer, t‡	1 6 6	—		
6000	New Clifford, c, Gwennap*	2 3 0	—		Feb. 1867
24000	New Cornish [12000 £1 pd., 12000 15s. pd.]				Sept. 1866
6400	N. Crow Hill, l, St. Stephen	3 2 0	—		Nov. 1866
6514	New E. Russell, c, Tavistk.	0 10 6	—		Sept. 1866
400	New Hendra, t, c, Breage	14 11 0	—		Mar. 1866
6400	New Pembroke, t, c	1 2 6	—		Mar. 1867
6000	New Tamar, s-l	0 7 6	—		Dec. 1866
5755	New Treleigh, c, Redruth	4 8 0	—		May, 1866
960	New Trevenen, t, Wendron	8 14 0	—		May, 1866
4096	New Wheal Lovell, t	1 11 0	—		Jan. 1867
400	New Wh. Seton, c, Cambn.	53 15 0	40		Dec. 1866
2000	New Wheal Towan, c, t	1 10 0	—		July, 1866
16000	North Devon, s-l*	0 16 0	—		July, 1866
5000	No. Dolcoath, c, Camborne.	4 3 0	—		Mar. 1867
3457	North Downs, c, Redruth	4 8 10	¾	½ ¾	Jan. 1867
1361	No. Grambler, c, Redruth	6 19 9	—		Dec. 1866
16000	N. Hallenbeagle [8000 £1 pd., 8000 8s. 6d. pd.]				July, 1865
6000	North Jane, t, s-l, Kenwyn.	3 1 6	1	¾ 1	Mar. 1867
2000	North Levant, t, c, St. Just	10 8 0	—		Sept. 1866
20000	Nth. Minera, l, Wrexham*	1 0 0	—		Fully pd.
4000	N. Phœnix, c, Linkinhorne	4 4 0	—		May, 1864
3933	North Pool, c, Illogan	5 16 0	4	4	Mar. 1867
1024	North Retallack Mine	2 0 0	—		Feb. 1867
695	No. Roskear, c, Camborne.	50 8 0	8½	7½ 8	Mar. 1867
2000	No. Shepherds, l, Newlyn	6 0 0	—		July, 1866
5936	No. Treskerby, c, St. Agnes	1 9 0	2½	1⅞ 2⅛	
6000	North Wheal Basset, c, t†	5 0 0	—		April, 1866
5610	North Wheal Crofty, c†	3 11 3	6	5⅛ 5¾	July, 1866
3000	North Wh. Chiverton, l.	4 0 0	—	4 4¼	Mar. 1867
6144	N. Wh. Robert, Smp. Spiney	4 8 11	—		Mar. 1867
12288	Okel Tor, c, Calstock	2 7 4	1⅝	1⅜ 1¾	Aug. 1866
8000	Old Gunnislake, c, Calstock	2 10 0	—		Aug. 1866
6400	Par Consols, c, St. Blazey†‡	2 7 0	—		Mar. 1867
8465	Pedn-an-drea, t, Redruth	5 16 6	—		Dec. 1866
5000	Pendeen Consols, c, St. Just	5 19 0	—		Feb. 1867
3340	Penhale Wheal Vor, t, c	3 2 0	—		Jan. 1867
5000	Penhalls, t, St. Agnes	3 0 0	—		May, 1866
15000	Penhale and Lomax, s-l	1 10 0	—		Oct. 1866
6000	Penralt, s-l, Merioneth*	2 7 0	—		Feb. 1865
1772	Polberro, t, St. Agnes	15 0 0	—		Fully pd.
512	Polbreen, t, St. Agnes	8 0 0	—		Aug. 1860
10000	Prince Arthur Consols, l*	2 0 0	—		Fully pd.
12800	Prince of Wales, t, Calstock	0 12 6	2⅞	55s 57s	Feb. 1867
12000	Redmoor, c, t, Callington	1 11 6	10s.		Feb. 1867
6000	Reinnie Laxey, l, I. of Man*	4 0 0	—		Feb. 1867
1024	Rose and Chiverton Un., l	5 0 0	5¾	5¼ 5¾	Nov. 1866
2000	Rosecliff and Tolcarne, l*	5 0 0	—		
3973	Rosewarne Consols, c	5 2 6	—		Feb. 1866
5915	Rosewall Hill & Ransom, c	3 0 0	2	2 2¼	Aug. 1866
3848	Rosewarne United, c, t	4 0 4	—		July, 1866
20500	Snaefell, l, Isle of Man*	1 0 0	—		Fully pd.
400	Silver Brook, s-l, Carmar.*	10 0 0	—		July, 1866
4096	Sithney Wheal Metal, t	4 5 6	—		Oct. 1866
12000	Sortridge Cons., c, Tavist.†	1 14 6	—		Oct. 1866
512	South Basset, c, Gwennap.	24 0 8	5		Feb. 1867
1024	South Callington, s-l	5 17 6	2		Jan. 1867
3000	So. Chiverton, s, l, Perran.	5 15 0	—		June, 1866

Shares.	Mines.	Paid.	Last Pr.	Bus. done.
6138	So. Condurrow, t, c, Camb.	3 13 6	1	17s 19s
2283	South Crenver, c, Crowan	12 9 0	—	
6000	S. Dolcoath & Carnarth. Con.	2 16 6	—	
5000	So. Exmouth, l, Christow	2 17 0	—	
5000	So. Foxdale, l, I. of Man*	3 10 0	—	
1024	So. Herodsfoot, l, Liskeard	9 10 0	—	
4000	South Minera, l, Wrexham*	5 0 0	—	
30210	South of Scotland, c*	0 17 6	—	
3000	South Trevenna, c, t	2 0 0	—	
937	So. Wh. Crofty, c, Illogan.	24 10 10	15	15 17
496	So. Wh. Frances, c, Illog.†‡	18 18 9	19	17 19
6000	South Wheal Grenville, t, c	0 18 0	10s.	
400	So. Wh. Seton, c, Camborne	74 13 0	—	
512	South Tolgus, c, Redruth	9 10 0	—	
64	Spearne Consols, t, St. Just	10 0 0	—	
280	Spearne Moor, t, St. Just	6 2 0	—	
4000	St. Day Unit., t, Redruth	17 7 6	—	
940	St. Ives Consols, t, St. Ives‡	10 15 0	10	9 10
673	St. Ives Wheal Allen, t	18 10 1	—	
9000	St. Just Cons. t [6000 £1 pd., 3000 10s. pd.]			
7000	Stiperstones, l, Salop*	4 10 0	—	
920	Stray Park, c, t, Camborne†‡	41 18 0	—	
3500	Tin Hill, t, St. Austell	1 8 0	—	
6000	Tolcarne, c, Camborne	3 1 6	—	
548	Trelyon Consols, t, St. Ives.	16 0 0	4	3 4
501	Tresavean and Trethurrup	15 10 0	—	
4440	Trevenen & Tremenheere	7 11 0	—	
4096	Treweatha, s-l, Menheniot.	7 17 0	—	
1943	Treworlis, t, Wendron	11 15 4	—	
2000	Trumpet Cons., t, Helston.	11 10 0	11	10 11
6400	Tyne Head, t, c*	0 18 0	—	
4200	Vigra and Clogau, c, Dolg.*‡	5 0 0	—	
60000	Welsh Gold, Dolgelly*	1 0 0	—	
6000	West Basset, c, Illogan†‡	1 15 0	—	
1024	West Caradon, c†‡	15 12 6	10	9 9¼
40000	West Clogau, g, Merioneth.	1 0 0	—	
1000	West Cwm Erfin, l*	5 0 0	—	
2850	W. Condurrow, t, c, Cam.	12 11 3	—	
256	West Damsel, c, Gwennap.	38 10 0	—	
12800	West Drake Walls, c	0 2 6	9s.	7s 8s
2592	West Great Work, t*	5 11 0	2¾	2¾ 3
5000	West Godolphin, t, c	—	3½	3½ 3¾
6000	West Great St. George, c	3 0 0	—	
12000	W. Maria & Fortes., c, Lam.	3 8 0	—	
1000	West Nanty, l*	10 0 0	—	
6000	Westminster, l*	5 0 0	5¾	5 5¼
12800	West Prince of Wales, c	—	—	½ ⅝
1000	West Rose Down, c, Linkin.	17 0 0	—	
6000	West St. Ives, t, c	0 5 0	1	¾ 1
256	W. Sharp Tor, c, Linkin.	190 0 0	—	
512	West Tolgus, c, Redruth	52 10 0	—	
512	W. Wh. Frances, t, Illogan	104 15 0	—	
5000	W. Wh. Kitty, t, St. Agnes.	2 15 6	9s.	7s 8s
1360	W. Wh. Prosper, t, Lanivet	5 18 0	—	
6000	Wheal Agar, c, Illogan	7 3 0	—	1¼ 1½
6000	Wheal Alice Alfred, t, c	2 0 0	2½	2 2½
6000	Wheal Basset Consols, c	0 5 0	—	
1000	Wheal Basset and Grylls, t	7 18 6	—	
512	Wheal Buller, Redruth†‡	21 10 0	25	24 26
6000	Wheal Crebor, c, Tavistock	2 6 6	—	9s 11s
6144	Wh. Damsel, c, t, Gwennap	2 15 0	—	
4096	Wh. Edward, c, Calstock	9 1 6	—	
849	Wheal Emily Henrietta, c.	16 15 0	10	
4000	Wh. Emma, c, Buckfastlei.	3 19 0	—	
1024	Wh. Exmouth, l, Christow‡	—	—	
6000	Wheal Grenville, c, Camb.†	9 15 6	1¼	1 1⅛
6000	Wheal Ida, s-l, St. Ive	1 0 0	—	
1024	Wh. Kitty, t, Uny Lelant†.	3 10 6	3½	
512	Wheal Jane, s-l, Kea	10 10 0	—	
896	Wh. Margaret, t, Uny Le.‡	13 17 6	8	7 8
728	Wheal Margery, t, c	24 4 10	—	
100	Wheal Mary, t, Lelant‡	36 2 6	—	
6000	Wheal Mary Florence, c*	1 19 0	—	
1000	Wh. Mary Hutchins, c, Plym.	1 5 6	—	
6000	Wh. Norris, t, c, St. Cleer	4 6 1	—	
80	Wheal Owles, t, St. Just‡	70 0 0	—	
1500	Wheal Sarah, t, Lanivet	0 13 8	—	
6000	Wheal Sparnon, c, Redruth	3 0 0	—	
1920	Wh. Trannack, c, Sithney.	1 13 3	—	
1200	Wheal Trevenna, t, c*	9 0 0	—	
4096	Wheal Uny, t, c, Redruth	10 16 0	2⅛	1⅝ 1⅞
6000	Wheal Union, c, Redruth	5 1 11	—	

MISCELLANEOUS.

Shares.	Companies.	Paid.	Last Pr.	Bus. done.
60000	Anglo-American Telegr.*†	10 0 0	16¼	15½ 16⅛
20000	Anglo-Mexican Mint†	10 0 0	16	15½ 16½
600000	Atlantic Telegraph*†	100 0 0	35	30 35
20000	Australian Agricultural†	20 10 0	19	17 19
47000	Berlin Waterworks*†	10 0 0	12¼	11¾ 12¼
25000	Bolckow, Vaughan*†	22 10 0	16½	
6000	British American Land†	44 0 0	25	20 25
534780	Brit. & Irish Mag. Teleg.*†	100 0 0	93	89 93
50000	British Shipowners†	7 10 0	4½	3 4
25000	Ceylon Company*†	10 0 0	10⅛	9 10
12000	ditto A shares*†	2 0 0	2	1 2
27000	China Stm.-ship & Lab. Coal†	11 0 0	2	½ ⅝
30000	City Discount*†	3 0 0	1½	1 1½
20000	City London Real Prop.*†	8 0 0	—	5 5½
35000	City of Moscow Gas*†	25 0 0	—	16 17
20000	City Offices*†	15 0 0	8¾	
50000	Commercial Uni. (Insu.)†	5 0 0	4¼	3¾ 4¼
42000	Copper Miners of Eng.† [2000 £25 pd., 40000 £100 pd.]			
10000	Cred. Fonc. of Mauritius*†	10 0 0	—	
1002925	Crystal Palace†	100 0 0	27	25 27
160820	ditto preference†	100 0 0	105	100 104
277000	ditto 6 per cent. p.d.†	100 0 0	108	105 108
7500	Darjeeling*†	14 0 0	13	11 13
20000	E. Indian Land, Credit*†	10 0 0	3½	
50000	E. India Irriga. & Canal†	16 10 0	12¾	12 13
80000	Ebbw Vale Iron Co.*†	25 0 0	10	9 10
113813	Egyptian Com. & Tradg.*†	7 0 0	3¾	2¾ 3
879975	Electric Telegraph†	100 0 0	134	130 133
20000	English and For. Credit*†	7 10 0	3½	
10000	English & Scot. Marine*†	8 0 0	—	
25000	Fairbairn Engineering*†	5 0 0	5	4 5
30000	Fore-street Warehouse*†	12 0 0	12¾	12¼ 12¾
200000	General Credit and Disc.*†	7 10 0	4¾	4¼ 4½
20000	General Stm. Navigation†	14 0 0	28	26 28
4000	Hollybush Col. and Coke*	5 0 0	—	
20000	Home and Colon. Assur.*†	5 0 0	1¾	1¼ 1¾
100000	Hudson's Bay†	20 0 0	16⅝	16⅛ 16⅝
80000	Im. Land Co. Marsailles*†	10 0 0	—	
50000	Indian Carrying*†	1 15 0	1	
150000	International Financial*†	5 0 0	—	
30000	Italian Land†	5 0 0	2¼	3¼ 3¾
4000	London African Tradg.*†	10 0 0	5	3 5
20000	Land Securities*†	5 0 0	—	
20000	London and Caledonian*†	5 0 0	—	
50000	London County & Build.*†	2 0 0	1¼	¾ 1¼
12000	London Dist. Telegraph*†	5 0 0	1½	1 1½
148525	London Gen. Omnibus *†	4 0 0	3½	2⅞ 3⅜
5000	London and Glas. Engi.*†	25 0 0	6	
64500	London & Prov. Marine*†	2 0 0	2	1¼ 1¾
10000	Marine Investment*†	6 5 0	—	
12500	Mauritius Land, Cred., &c.*†	2 0 0	1¾	
12000	Mediterranean Ex. Tel. *†	10 0 0	2¾	2¼ 2¾
10000	Merchant Shipping*†	25 0 0	13	17¼ 18¾
500000	Millwall Freehold Land*†	100 0 0	35	30 40
40000	Millwall Ironworks*†	7 10 0	—	
30000	Mineral Rights Assoc.*	1 0 0	—	
22500	Natal Land and Col. *†	5 0 0	1	
120000	National Discount*†	5 0 0	13¼	12¾ 13
40000	ditto new, issued at 5 pm.†	3 15 0	10½	5¾ 6
20000	National Provin. Marine*†	2 10 0	—	
20000	National Steam Naviga.*†	30 0 0	14	12 14
20000	New Zealand Loan, &c. *†	2 10 0	3¼	2 2¼
20000	New Zealand Trust, &c.*†	5 0 0	5½	5¼ 5½
40000	N. British & Merc. Insur.†	6 5 0	16	14½ 15½
30000	Oriental Gas*†	5 0 0	5½	5¼ 5½
30000	ditto New*†	1 0 0	1¼	1 1¼
25000	Otago and Southland*†	2 0 0	1¾	
20000	Peninsular and Oriental*†	50 0 0	66	59 61
20000	ditto ditto New*†	50 0 0	66	59 61
10000	Rhymney Iron*†	50 0 0	26	23 25
10000	ditto New*†	50 0 0	8	6½ 7½
15000	Royal Mail Steam*†	60 0 0	109	100 103
300000	Scottish Austr. Invest.*†	100 0 0	125	120 125
14200	South Australian Land*†	25 0 0	35	32 34
280000	Submarine Telegraph*†	100 0 0	70	
—	ditto Scrip*†	1 0 0	⅞	
100000	Thames & Mersey Marine*†	2 0 0	6⅛	4⅝ 5⅛
30000	Uni. Kingdom Telegraph*†	5 0 0	2½	1⅞ 2⅛
20000	ditto 10 per cent. pref.*†	5 0 0	5	

b, blende; cl, coal; c, copper; g, gold; l, lead; s, silver; sl., slate; s-l, silver-lead; t, tin; z, zinc.

, Companies marked thus * have been incorporated with Limited Liability; those marked † have been admitted on the Stock E[xchange]; those marked thus ‡ have paid Dividends.

, Our object being to make the Share List correct, we earnestly call upon those who have the power to aid us, by forwarding a[ny addi]tions or correction which may, from time to time, come under their notice. To shareholders, as well as those officially conn[ected with] the mines, we appeal for information. Reports from mines—in fact, mining intelligence of every description, forwarded to [us,] will meet with ready attention.

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